# GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on:

February 28, 2004, 03:39:37; Search time 4277 Seconds

(without alignments)

12595.598 Million cell updates/sec

Title:

US-09-668-314C-1

Perfect score: 1804

Sequence:

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched:

27513289 seqs, 14931090276 residues

Total number of hits satisfying chosen parameters:

55026578

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

EST: \*

1: em estba:\*

2: em esthum:\*

3: em estin:\*

em estmu:\* 4:

5: em estov:\*

em estpl:\* 6:

7: em estro:\*

8: em htc:\*

9: gb est1:\*

10: gb\_est2:\*

11: gb htc:\*

12: gb\_est3:\*

13: gb est4:\*

14: gb\_est5:\*

15: em\_estfun:\*

16: em estom:\*

17: em gss hum: \*

18: em\_gss\_inv:\*

19: em\_gss\_pln:\*

20: em\_gss\_vrt:\*

21: em gss fun:\*

22: em gss mam:\*

23: em gss mus:\* 24: em\_gss\_pro:\*

25: em\_gss\_rod:\*

26: em gss phg:\*

27: em gss vrl:\*

28: gb\_gss1:\*
29: gb\_gss2:\*

용

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

D			0				
Res	ult	Caama	Query	Length	DΒ	ID	Description
	No.	Score	Ma LCII	Leng cn			
	1	1182.2	65.5	3703	11	AK078770	AK078770 Mus muscu
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С	4	910	50.4	970	13	BQ688240	BQ688240 AGENCOURT
c	5	894.4	49.6	1015	13	BX401345	BX401345 BX401345
Ŭ	6	855.8	47.4	1245	29	AY419489	AY419489 Mus muscu
	7	821.6	45.5	1004	13	BX401346	BX401346 BX401346
	8	815.8	45.2	970	29	AY419488	AY419488 Pan trogl
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### ALIGNMENTS

RESULT 1 AK078770 HTC 18-SEP-2003 3703 bp mRNA linear AK078770 LOCUS DEFINITION Mus musculus 15 days embryo male testis cDNA, RIKEN full-length enriched library, clone:8030470009 product:beta-site APP-cleaving enzyme 2, full insert sequence. AK078770 ACCESSION AK078770.1 GI:26347470 VERSION KEYWORDS HTC; CAP trapper. Mus musculus (house mouse) SOURCE ORGANISM Mus musculus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. REFERENCE Carninci, P. and Hayashizaki, Y. AUTHORS High-efficiency full-length cDNA cloning TITLE Meth. Enzymol. 303, 19-44 (1999) JOURNAL 99279253 MEDLINE 10349636 PUBMED REFERENCE Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., **AUTHORS** Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to TITLE prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000) JOURNAL 20499374 MEDLINE PUBMED 11042159 REFERENCE 3 Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., **AUTHORS** Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. RIKEN integrated sequence analysis (RISA) system--384-format TITLE sequencing pipeline with 384 multicapillary sequencer Genome Res. 10 (11), 1757-1771 (2000) JOURNAL MEDLINE 20530913 PUBMED 11076861 REFERENCE The RIKEN Genome Exploration Research Group Phase II Team and the **AUTHORS** FANTOM Consortium. Functional annotation of a full-length mouse cDNA collection TITLE Nature 409, 685-690 (2001) JOURNAL REFERENCE The FANTOM Consortium and the RIKEN Genome Exploration Research AUTHORS Group Phase I & II Team. Analysis of the mouse transcriptome based on functional annotation TITLE of 60,770 full-length cDNAs Nature 420, 563-573 (2002) JOURNAL 6 (bases 1 to 3703) REFERENCE

```
Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P.,
 AUTHORS
            Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W.,
            Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Hirozane, T.,
            Hori, F., Imotani, K., Ishii, Y., Itoh, M., Kagawa, I., Kasukawa, T.,
            Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M.,
            Koya, S., Kurihara, C., Matsuyama, T., Miyazaki, A., Murata, M.,
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            Sogabe, Y., Tagami, M., Tagawa, A., Takahashi, F., Takaku-Akahira, S.,
            Takeda, Y., Tanaka, T., Tomaru, A., Toya, T., Yasunishi, A.,
            Muramatsu, M. and Hayashizaki, Y.
  TITLE
            Direct Submission
            Submitted (16-APR-2002) Yoshihide Hayashizaki, The Institute of
  JOURNAL
            Physical and Chemical Research (RIKEN), Laboratory for Genome
            Exploration Research Group, RIKEN Genomic Sciences Center (GSC),
            RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama,
            Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.go.jp,
            URL: http://genome.gsc.riken.go.jp/, Tel:81-45-503-9222,
            Fax:81-45-503-9216)
            cDNA library was prepared and sequenced in Mouse Genome
COMMENT
            Encyclopedia Project of Genome Exploration Research Group in Riken
            Genomic Sciences Center and Genome Science Laboratory in RIKEN.
            Division of Experimental Animal Research in Riken contributed to
            prepare mouse tissues.
            Please visit our web site for further details.
            URL:http://genome.gsc.riken.go.jp/
            URL:http://fantom.gsc.riken.go.jp/.
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# ORIGIN

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REFERENCE
           Carninci, P. and Hayashizaki, Y.
  AUTHORS
           High-efficiency full-length cDNA cloning
  TITLE
           Meth. Enzymol. 303, 19-44 (1999)
  JOURNAL
           99279253
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           Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K.,
  AUTHORS
           Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y.
           Normalization and subtraction of cap-trapper-selected cDNAs to
  TITLE
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           Genome Res. 10 (10), 1617-1630 (2000)
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            Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M.,
            Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A.,
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            Genome Res. 10 (11), 1757-1771 (2000)
  JOURNAL
            20530913
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REFERENCE
            The RIKEN Genome Exploration Research Group Phase II Team and the
  AUTHORS
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FANTOM Consortium.
            Functional annotation of a full-length mouse cDNA collection
  TITLE
            Nature 409, 685-690 (2001)
  JOURNAL
REFERENCE
            The FANTOM Consortium and the RIKEN Genome Exploration Research
  AUTHORS
            Group Phase I & II Team.
            Analysis of the mouse transcriptome based on functional annotation
  TITLE
            of 60,770 full-length cDNAs
            Nature 420, 563-573 (2002)
  JOURNAL
REFERENCE
               (bases 1 to 1810)
            Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P.,
  AUTHORS
            Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W.,
            Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Hirozane, T.,
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            Muramatsu, M. and Hayashizaki, Y.
  TITLE
            Direct Submission
            Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of
  JOURNAL
            Physical and Chemical Research (RIKEN), Laboratory for Genome
            Exploration Research Group, RIKEN Genomic Sciences Center (GSC),
            RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama,
            Kanaqawa 230-0045, Japan (E-mail:genome-res@gsc.riken.go.jp,
            URL: http://genome.gsc.riken.go.jp/, Tel:81-45-503-9222,
            Fax:81-45-503-9216)
            cDNA library was prepared and sequenced in Mouse Genome
COMMENT
            Encyclopedia Project of Genome Exploration Research Group in Riken
            Genomic Sciences Center and Genome Science Laboratory in RIKEN.
            Division of Experimental Animal Research in Riken contributed to
            prepare mouse tissues.
            Please visit our web site for further details.
            URL:http://genome.gsc.riken.go.jp/
            URL:http://fantom.gsc.riken.go.jp/.
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          Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
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          Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
          Adams, M.D. and Cargill, M.
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          Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
          Adams, M.D. and Cargill, M.
  TITLE
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NIH-MGC http://mgc.nci.nih.gov/.
 AUTHORS
          National Institutes of Health, Mammalian Gene Collection (MGC)
 TITLE
 JOURNAL
          Unpublished (1999)
COMMENT
          Contact: Robert Strausberg, Ph.D.
          Email: cgapbs-r@mail.nih.gov
          Tissue Procurement: ATCC
           cDNA Library Preparation: Rubin Laboratory
           cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
           DNA Sequencing by: Agencourt Bioscience Corporation
           Clone distribution: MGC clone distribution information can be
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                  Ling Hong in the laboratory of Gerald M. Rubin (University
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ACCESSION BX401345

VERSION BX401345.1 GI:30614534

KEYWORDS EST.

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ORGANISM Homo sapiens

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REFERENCE
          Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
 AUTHORS
 TITLE
          Full-length cDNA libraries and normalization
 JOURNAL
          Unpublished (2001)
COMMENT
          Contact: Genoscope
          Genoscope - Centre National de Sequencage
          BP 191 91006 EVRY cedex - France
          Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
          Library was constructed by Life Technologies, a division of
          Invitrogen. This sequence belongs to sequence cluster 10331.f For
          more information about this cluster, see
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          cqi-bin/cluster.cqi?seq=CSODK012BB10NP1&cluster=10331.f. Contact:
          Feng Liang Email: fliang@lifetech.com URL:
          http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
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Qy	1547	GCTGGAAATGAATAGCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAAT	1606
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Db	240	CACATTTCCAGGGCAGCAGCMGGGATCGAHGGTGGCGCTHTCTCCTGTGCCCACCCSTCH	181
Qy	1667	TCAATCTCTGTTCTGCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTT	1726
Db		TCAATCTCTGTTCTGCTCCCAGATGCCTTCTAGATACACTGTCTTTTGATTCTTGATTTT	
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Db		CAAGGCTTTCAAATCCTCCCGRCTTCCAAGAMAAATAATTAAAAAAAAAACTTCATTCTA	61
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DЬ	60	ATYCAAAACAGA 49	

# RESULT 6 AY419489

LOCUS AY419489 1245 bp DNA linear GSS 17-DEC-2003

DEFINITION Mus musculus BACE2 gene, VIRTUAL TRANSCRIPT, partial sequence,

genomic survey sequence.

ACCESSION AY419489

VERSION AY419489.1 GI:39775446

KEYWORDS GSS.

SOURCE Mus musculus (house mouse)

ORGANISM Mus musculus

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE
              (bases 1 to 1245)
           Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
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           Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
           Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
           Adams, M.D. and Cargill, M.
           Inferring nonneutral evolution from human-chimp-mouse orthologous
 TITLE
           gene trios
           Science 302 (5652), 1960-1963 (2003)
 JOURNAL
           14671302
  PUBMED
              (bases 1 to 1245)
REFERENCE
          2
          Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
 AUTHORS
           Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
           Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
           Adams, M.D. and Cargill, M.
           Direct Submission
 TITLE
           Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive,
 JOURNAL
           Rockville, MD 20850, USA
           These sequences were made by sequencing genomic exons and ordering
COMMENT
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Qу
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	Qy	854	GCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCCATCGTGGACAGTG	913
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LOCUS
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DEFINITION
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ACCESSION
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VERSION
           BX401346.1 GI:30618464
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SOURCE
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           1 (bases 1 to 1004)
REFERENCE
           Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
 AUTHORS
           Full-length cDNA libraries and normalization
  TITLE
           Unpublished (2001)
  JOURNAL
COMMENT
           Contact: Genoscope
           Genoscope - Centre National de Sequencage
           BP 191 91006 EVRY cedex - France
           Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
           Library was constructed by Life Technologies, a division of
           Invitrogen. This sequence belongs to sequence cluster 10331.f For
           more information about this cluster, see
           http://www.genoscope.cns.fr/
           cgi-bin/cluster.cgi?seg=CSODK012BB10QP1&cluster=10331.f. Contact:
           Feng Liang Email : fliang@lifetech.com URL :
           http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
           Faraday Avenue Genoscope sequence ID : CSODK012BB10QP1.
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Qy	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
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RESULT 8 AY419488

LOCUS AY419488 970 bp DNA linear GSS 17-DEC-2003 DEFINITION Pan troglodytes BACE2 gene, VIRTUAL TRANSCRIPT, partial sequence,

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genomic survey sequence.
ACCESSION
           AY419488
           AY419488.1 GI:39775445
VERSION
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REFERENCE
           1 (bases 1 to 970)
           Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
 AUTHORS
           Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
           Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
           Adams, M.D. and Cargill, M.
  TITLE
           Inferring nonneutral evolution from human-chimp-mouse orthologous
           gene trios
           Science 302 (5652), 1960-1963 (2003)
  JOURNAL
           14671302
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              (bases 1 to 970)
REFERENCE
           Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
 AUTHORS
           Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
           Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
           Adams, M.D. and Cargill, M.
  TITLE
           Direct Submission
           Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive,
  JOURNAL
           Rockville, MD 20850, USA
           These sequences were made by sequencing genomic exons and ordering
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           them based on alignment.
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Qy	994	TTCTCTGATGGTTTCTGGACTGGGTCCCAGCTGGCGTGCTGGACGAATTCGGAAACACCT	1053
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RESULT 9 BU179147

LOCUS BU179147 908 bp mRNA linear EST 04-SEP-2002 DEFINITION AGENCOURT\_8050401 NIH\_MGC\_112 Homo sapiens cDNA clone IMAGE:6089176

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          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
          1 (bases 1 to 908)
          NIH-MGC http://mgc.nci.nih.gov/.
 AUTHORS
          National Institutes of Health, Mammalian Gene Collection (MGC)
 TITLE
 JOURNAL
          Unpublished (1999)
          Contact: Robert Strausberg, Ph.D.
COMMENT
          Email: cgapbs-r@mail.nih.gov
          Tissue Procurement: DCTD/DTP
           cDNA Library Preparation: Rubin Laboratory
           cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
           DNA Sequencing by: Agencourt Bioscience Corporation
           Clone distribution: MGC clone distribution information can be
          found through the I.M.A.G.E. Consortium/LLNL at:
          http://image.llnl.gov
          Plate: LLCM2328 row: i column: 17
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Db
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Db			
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# RESULT 10 CA489608

LOCUS CA489608 912 bp mRNA linear EST 14-NOV-2002 DEFINITION AGENCOURT\_10810689 MAPCL Homo sapiens cDNA clone IMAGE:6722086 5',

mRNA sequence.

ACCESSION CA489608

VERSION CA489608.1 GI:24952399

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KEYWORDS
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          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
          1 (bases 1 to 912)
 AUTHORS
          NIH-MGC http://mgc.nci.nih.gov/.
          National Institutes of Health, Mammalian Gene Collection (MGC)
 TITLE
 JOURNAL
          Unpublished (1999)
          Contact: Robert Strausberg, Ph.D.
COMMENT
          Email: cgapbs-r@mail.nih.gov
          Tissue Procurement: Kristi A. Egland, Ira Pastan
           cDNA Library Preparation: Invitrogen Corp
           cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
           DNA Sequencing by: Agencourt Bioscience Corporation
           Clone distribution: MGC clone distribution information can be
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                   insert size: 1800 bp. Library amplification: 26,000 fold.
                  Kristi A. Egland, James J. Vincent, Robert Strausberg,
                  Bungkook Lee & Ira Pastan: Discovery of new breast
                   cancer genes encoding membrane and secreted proteins.
                  Manuscript submitted."
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# RESULT 11 BQ945383

LOCUS BQ945383 968 bp mRNA linear EST 21-AUG-2002 DEFINITION AGENCOURT 10030827 NIH MGC 40 Homo sapiens cDNA clone IMAGE: 6481468 5', mRNA sequence.

ACCESSION BQ945383

VERSION BQ945383.1 GI:22360861

KEYWORDS EST.

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REFERENCE
          NIH-MGC http://mgc.nci.nih.gov/.
 AUTHORS
          National Institutes of Health, Mammalian Gene Collection (MGC)
 TITLE
 JOURNAL
          Unpublished (1999)
          Contact: Robert Strausberg, Ph.D.
COMMENT
          Email: cgapbs-r@mail.nih.gov
          Tissue Procurement: DCTD/DTP
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                   Ling Hong in the laboratory of Gerald M. Rubin (University
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                  Note: this is a NIH MGC Library."
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mRNA sequence.

ACCESSION CA454208

VERSION CA454208.1 GI:24903721

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SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

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REFERENCE
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 AUTHORS
          National Institutes of Health, Mammalian Gene Collection (MGC)
 TITLE
 JOURNAL
          Unpublished (1999)
COMMENT
          Contact: Robert Strausberg, Ph.D.
          Email: cgapbs-r@mail.nih.gov
           Tissue Procurement: Kristi A. Egland, Ira Pastan
           cDNA Library Preparation: Invitrogen Corp
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           DNA Sequencing by: Agencourt Bioscience Corporation
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                   Kristi A. Egland, James J. Vincent, Robert Strausberg,
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                   Manuscript submitted."
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AUTHORS
          NIH-MGC http://mgc.nci.nih.gov/.
          National Institutes of Health, Mammalian Gene Collection (MGC)
 TITLE
 JOURNAL
          Unpublished (1999)
COMMENT
          Contact: Robert Strausberg, Ph.D.
          Email: cgapbs-r@mail.nih.gov
          Tissue Procurement: Kristi A. Egland, Ira Pastan
           cDNA Library Preparation: Invitrogen Corp
           cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
           DNA Sequencing by: Agencourt Bioscience Corporation
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                  Kristi A. Egland, James J. Vincent, Robert Strausberg,
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                  cancer genes encoding membrane and secreted proteins.
                  Manuscript submitted."
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REFERENCE AUTHORS TITLE		(bases 1 to 836)					
		NIH-MGC http://mgc.nci.nih.gov/. National Institutes of Health, Mammalian Gene Collection (MGC)					
JOURNAL		National institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999)					
COMMENT		Contact: Robert Strausberg, Ph.D.					
		Email: cgapbs-r@mail.nih.gov					
	1	issue Procurement: Kristi A. Egland, Ira Pastan					

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cDNA Library Preparation: Invitrogen Corp
           cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
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           Clone distribution: MGC clone distribution information can be
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                  insert size: 1800 bp. Library amplification: 26,000 fold.
                 Kristi A. Egland, James J. Vincent, Robert Strausberg,
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                  cancer genes encoding membrane and secreted proteins.
                 Manuscript submitted."
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Qу	118	TCGGCATTTCCCCATCCACAAATGCGCTGGTGATCGGTGCCA-CGGTGATGGAGGGCTTC 1245
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AUTHORS TITLE	S 1	WIH-MGC http://mgc.nci.nih.gov/. Wational Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAI COMMENT	; ;	Inpublished (1999) Contact: Robert Strausberg, Ph.D. Cmail: cgapbs-r@mail.nih.gov Cissue Procurement: ATCC/DCTD/DTP cDNA Library Preparation: Ling Hong/Rubin Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can be Cound through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov Clate: LLCM1227 row: k column: 17

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FEATURES
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                /note="Organ: skin; Vector: pOTB7; Site 1: XhoI; Site 2:
                EcoRI; cDNA made by oligo-dT priming. Directionally
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                adaptor: GGCACGAG(G). Size-selected >500bp for average
                insert size 1.8kb. Library constructed by Ling Hong in
                the laboratory of Gerald M. Rubin (University of
                California, Berkeley) using ZAP-cDNA synthesis kit
                (Stratagene) and Superscript II RT (Life Technologies)."
ORIGIN
                   43.1%; Score 777.4; DB 12; Length 843;
 Query Match
 Best Local Similarity
                   97.7%; Pred. No. 8.3e-105;
 Matches 820; Conservative
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High quality sequence stop: 818.

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Qу	1425	${\tt CATGAGCGTCTGTGGAGCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCTGTTCCG}$	1484
DЪ	665	${\tt CATGAGCGTCTGTGGAGCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT$	724
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Search completed: February 28, 2004, 07:03:45 Job time : 4288 secs

# GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

February 28, 2004, 02:43:37; Search time 6893 Seconds Run on:

(without alignments)

11343.513 Million cell updates/sec

Title:

US-09-668-314C-1

Perfect score: 1804

Sequence:

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched:

3470272 seqs, 21671516995 residues

Total number of hits satisfying chosen parameters:

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Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

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1: qb ba:\*

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3: gb in:\*

gb om: \* 4:

gb ov:\* 5:

6: gb\_pat:\*

7: gb\_ph:\*

8: gb pl:\*

9: gb pr:\*

10: gb ro:\*

11: gb sts:\*

12: gb sy:\*

13: gb un:\*

14: gb\_vi:\* 15: em ba:\*

16: em fun:\*

17: em hum:\*

18: em in:\*

19: em mu:\*

20: em om: \*

em or:\* 21:

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27: em sts:\*

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28: em_un:*
29: em_vi:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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7	1790.6	99.3	2990	9	AF178532	AF178532 Homo sapi
8	1788.2	99.1	1885	9	AF200192	AF200192 Homo sapi
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15	1765.6	97.9	1862	6	AR136909	AR136909 Sequence
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26	1482.2	82.2	2840	9	AF188276	AF188276 Homo sapi
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33	1179.4	65.4	1774	10	AF216310	AF216310 Mus muscu

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#### ALIGNMENTS

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ACCESSION
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VERSION
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REFERENCE
            Gurney, M. E., Bienkowski, M. J., Heinrikson, R. L., Parodi, L. A. and
  AUTHORS
            Yan, R.
  TITLE
            Alzheimer's disease secretase
            Patent: JP 2002526081-A 1 20-AUG-2002;
  JOURNAL
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                 20-AUG-2002
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                 24-SEP-1998 US
                                    60/101594
            PR
                 MARK E GURNEY, MICHAEL JEROME BIENKOWSKI, ROBERT LEROY PI
            PΙ
            HEINRIKSON,
                 LUIS A PARODI, RIQIANG YAN
            PT
                 C12N15/09,A61K45/00,A61P25/28,C07K14/47,C07K16/18,C12N1/15, PC
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z, Db				
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Db	•	61		120
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Db	•	181	GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCCAACTTCTTGGCCATG	240
Qу	,	241	GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC	300
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Dk	•	361	ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	420
QΣ	7	421	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	480
Dk	)	421	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	480
QΣ	,	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
Dk	)	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
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Dk	)	541	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	600
Qζ	7	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
Dk	•	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
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      Qу
          Db
Qу
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LOCUS
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DEFINITION
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REFERENCE
         Gurney, M.E., Bienkowski, M.J., Heinrikson, R.L., Parodi, L.A. and
 AUTHORS
         Alzheimer's disease secretase, APP substrates therefor, and uses
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AR269223 LOCUS AR269223 1804 bp DNA linear PAT 10-APR-2003

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VERSION
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SOURCE
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         Unclassified.
REFERENCE
           (bases 1 to 1804)
         Gurney, M.E., Bienkowski, M.J., Heinrikson, R.L., Parodi, L.A. and
 AUTHORS
         Yan, R.
         Aspartyl protease 2 (Asp2) antisense oligonucleotides
 TITLE
         Patent: US 6500667-A 1 31-DEC-2002;
 JOURNAL
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REFERENCE
 AUTHORS
         Gurney, M. and Bienkowski, M.J.
 TITLE
         Alzheimer's disease secretase, app substrates therefor, and uses
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 JOURNAL
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QУ	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA 1440
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RESULT 6 AF200342

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REFERENCE
              (bases 1 to 1804)
 AUTHORS
           Yan, R., Bienkowski, M.J., Shuck, M.E., Miao, H., Tory, M.C.,
           Pauley, A.M., Brashier, J.R., Stratman, N.C., Mathews, W.R., Buhl, A.E.,
           Carter, D.B., Tomasselli, A.G., Parodi, L.A., Heinrikson, R.L. and
           Gurney, M.E.
           Membrane-anchored aspartyl protease with Alzheimer's disease
 TITLE
           beta-secretase activity
           Nature 402 (6761), 533-537 (1999)
 JOURNAL
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              (bases 1 to 1804)
           Bienkowski, M.J., Shuck, M.E., Slightom, J.L. and Drong, R.F.
 AUTHORS
 TITLE
           Direct Submission
           Submitted (29-OCT-1999) Genomics Research, Pharmacia&Upjohn, 301
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RESULT 7 AF178532 LOCUS 2990 bp linear PRI 21-SEP-2000 AF178532 mRNA Homo sapiens aspartyl protease (BACE2) mRNA, complete cds. DEFINITION ACCESSION AF178532 VERSION AF178532.1 GI:6851265 KEYWORDS Homo sapiens (human) SOURCE ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. REFERENCE (bases 1 to 2990) Solans, A., Estivill, X. and de La Luna, S. AUTHORS TITLE A new aspartyl protease on 21q22.3, BACE2, is highly similar to Alzheimer's amyloid precursor protein beta-secretase Cytogenet. Cell Genet. 89 (3-4), 177-184 (2000) **JOURNAL** 20422477 MEDLINE PUBMED 10965118 REFERENCE (bases 1 to 2990) AUTHORS Solans, A., Estivill, X. and de la Luna, S. TITLE Direct Submission Submitted (18-AUG-1999) Medical and Molecular Genetics Center, IRO, **JOURNAL** Avia. Castelldefels Km 2,7, L'Hospitalet de Llobregat, Barcelona 08907, Spain **FEATURES** Location/Qualifiers 1. .2990 source /organism="Homo sapiens" /mol type="mRNA" /db xref="taxon:9606" /chromosome="21" /map="21q22.3" /clone="YAC 552A3" 1. .2990 gene /gene="BACE2" CDS 464. .2020 /gene="BACE2" /codon\_start=1 /product="aspartyl protease" /protein id="AAF29494.1" /db xref="GI:6851266"

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REFERENCE
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          Lin, X., Koelsch, G., Wu, S., Downs, D., Dashti, A. and Tang, J.
 AUTHORS
 TITLE
          Human aspartic protease memapsin 2 cleaves the beta-secretase site
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 JOURNAL
          Proc. Natl. Acad. Sci. U.S.A. 97 (4), 1456-1460 (2000)
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 AUTHORS
          Lin, X., Koelsch, G. and Tang, J.
          Direct Submission
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          Submitted (28-OCT-1999) Protein Studies Program, Oklahoma Medical
 JOURNAL
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REFERENCE
 AUTHORS
         Baker, K.P., Chen, J., Desnoyers, L., Goddard, A., Godowski, P.J.,
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            Clark, H.F., Gurney, A.L., Abaya, E., Baker, K., Baldwin, D., Brush, J.,
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            The Secreted Protein Discovery Initiative (SPDI), a Large-Scale
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REFERENCE
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  AUTHORS
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REFERENCE
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  AUTHORS
           Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
           Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
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           Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
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  TITLE
           Generation and initial analysis of more than 15,000 full-length
           human and mouse cDNA sequences
           Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
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  AUTHORS
           Strausberg, R.
  TITLE
           Direct Submission
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           Gene Collection (MGC), Cancer Genomics Office, National Cancer
           Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
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NIH-MGC Project URL: http://mgc.nci.nih.gov

REMARK

COMMENT Contact: MGC help desk Email: cgapbs-r@mail.nih.gov Tissue Procurement: ATCC/DCTD/DTP cDNA Library Preparation: Rubin Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Genome Sequence Centre, BC Cancer Agency, Vancouver, BC, Canada info@bcgsc.bc.ca Steven Jones, Jennifer Asano, Ian Bosdet, Yaron Butterfield, Susanna Chan, Readman Chiu, Chris Fjell, Erin Garland, Ran Guin, Letticia Hsiao, Martin Krzywinski, Reta Kutsche, Oliver Lee, Soo Sen Lee, Victor Ling, Carrie Mathewson, Candice McLeavy, Steven Ness, Pawan Pandoh, Anna-Liisa Prabhu, Parvaneh Saeedi, Jacqueline Schein, Duane Smailus, Michael Smith, Lorraine Spence, Jeff Stott, Michael Thorne, Miranada Tsai, Natasja van den Bosch, Jill Vardy, George Yang, Scott Zuyderduyn, Marco Marra. Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAL Plate: 34 Row: 1 Column: 22 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 21040358. **FEATURES** Location/Qualifiers 1. .1864 source /organism="Homo sapiens" /mol type="mRNA" /db xref="taxon:9606" /clone="MGC:23029 IMAGE:4868925" /tissue type="Skin, melanotic melanoma, high MDR." /clone lib="NIH MGC 49" /lab host="DH10B-R" /note="Vector: pOTB7" 1. .1864 gene /gene="BACE2" /note="synonyms: DRAP, ALP56, AEPLC, CEAP1, ASP1, ASP21, BAE2, CDA13" /db xref="LocusID:25825" /db xref="MIM:605668" CDS 92. .1648 /codon start=1 /product="beta-site APP-cleaving enzyme 2, isoform A preproprotein" /protein id="AAH14453.1" /db xref="GI:15680204" /db xref="LocusID:25825" /translation="MGALARALLLPLLAQWLLRAAPELAPAPFTLPLRVAAATNRVVA PTPGPGTPAERHADGLALALEPALASPAGAANFLAMVDNLQGDSGRGYYLEMLIGTPP QKLQILVDTGSSNFAVAGTPHSYIDTYFDTERSSTYRSKGFDVTVKYTQGSWTGFVGE DLVTIPKGFNTSFLVNIATIFESENFFLPGIKWNGILGLAYATLAKPSSSLETFFDSL VTQANIPNVFSMQMCGAGLPVAGSGTNGGSLVLGGIEPSLYKGDIWYTPIKEEWYYQI EILKLEIGGQSLNLDCREYNADKAIVDSGTTLLRLPQKVFDAVVEAVARASLIPEFSD

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### ORIGIN

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          Xin, H. and Giese, K.
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AUTHOR:	S } F	Kin, H., Stephans, J.C., Duan, X., Harrowe, G., Kim, E., Grieshammer, U., Kingsley, C. and Giese, K.  Edentification of a novel aspartic-like protease differentially expressed in human breast cancer cell lines

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JOURNAL
          Biochim. Biophys. Acta 1501 (2-3), 125-137 (2000)
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          Xin, H., Stephans, J.C., Duan, X., Harrowe, G., Kim, E., Grieshammer, U.
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 JOURNAL
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JOURNAL Patent: US 6162630-A 1 19-DEC-2000;

FEATURES Location/Qualifiers

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Qу	1681	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC 1740	)
Db	1771	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC 1830	)
Qу	1741	CTCCCTACTTCCAAGAAAATAATTAAAAAAA 1772	
Db			

Search completed: February 28, 2004, 05:40:18 Job time : 6912 secs

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OM nucleic - nucleic search, using sw model

Run on: February 28, 2004, 02:44:52; Search time 702 Seconds

(without alignments)

10917.022 Million cell updates/sec

US-09-668-314C-1 Title:

Perfect score: 1804

Sequence: 

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

3373863 segs, 2124099041 residues Searched:

Total number of hits satisfying chosen parameters: 6747726

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : N\_Geneseq\_29Jan04:\*

1: geneseqn1980s:\*

2: geneseqn1990s:\*

3: geneseqn2000s:\*

4: geneseqn2001as:\*

5: geneseqn2001bs:\*

6: geneseqn2002s:\*

7: geneseqn2003as:\*

8: geneseqn2003bs:\*

9: geneseqn2003cs:\*

10: geneseqn2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	<pre>% Query Match</pre>	Length	DB	ID	Description
1	1804	100.0	1804	3	AAA15661	Aaa15661 Human asp
2	1804	100.0	1804	4	AAS11701	Aas11701 DNA encod
3	1804	100.0	1804	4	AAD17864	Aad17864 Human asp
4	1804	100.0	1804	4	AAD13020	Aad13020 Human asp
5	1804	100.0	1804	4	AAD06738	Aad06738 Human asp
6	1804	100.0	1804	4	AAS11516	Aas11516 Human cDN
7	1804	100.0	1804	6	ABL52456	Abl52456 Human Asp

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Aaz34056 Human PRO
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              98.9
                     1879
                           2
                                                           Aac78500 Human PRO
   1784.4
9
              98.9
                     1879
                           3
                               AAC78500
                                                           Aas45960 Human DNA
10
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                     1879
                            4
                               AAS45960
                                                           Abx78563 Human PRO
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                                                           Aca75535 Novel hum
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#### ALIGNMENTS

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ΙD
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XX
     AAA15661;
AC
XX
DT
     03-AUG-2000 (first entry)
XX
     Human aspartyl protease 1 (Asp1) nucleotide sequence.
DE
XX
     Aspartyl protease; aspartase; amyloid precursor protein; APP; Asp 1;
KW
KW
     Alzheimer's disease; beta secretase site; ss.
XX
OS
     Homo sapiens.
```

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XX
    WO200017369-A2.
PN
XX
PD
    30-MAR-2000.
XX
PF
    23-SEP-1999;
                  99WO-US020881.
XX
PR
    24-SEP-1998;
                  98US-0101594P.
XX
PΑ
    (PHAA ) PHARMACIA & UPJOHN CO.
XX
PI
    Gurney ME, Bienkowski MJ, Heinrikson RL, Parodi LA, Yan R;
XX
    WPI; 2000-303209/26.
DR
    P-PSDB; AAY88424.
DR
XX
    New enzyme designated human aspartase useful in research into Alzheimer's
PT
    Disease is capable of cleaving amyloid protein precursor at the beta
PT
    secretase site to produce amyloid beta peptide.
PT
XX
    Claim 11; Fig 1; 183pp; English.
PS
XX
    This sequence represents the human aspartyl protease nucleotide sequence.
CC
    The invention relates to a protease capable of cleaving the beta
CC
    secretase site of amyloid precursor protein (APP). The protease contains
CC
    a sequence encoding the amino acid sequence DTG and a sequence encoding
CC
    DSG or DTG separated by 100-300 amino acids. When mutated the APP gene
CC
    causes an autosomal dominant form of Alzheimer's disease. APP localises
CC
    to the cell surface membrane and have a single C-terminal transmembrane
CC
    domain. Proteolytic processing of APP produces the amyloid beta protein,
CC
    which is possibly very important in Alzheimer's disease. The invention
CC
    includes a nucleotide sequence encoding the protease, a vector containing
CC
    the nucleotide sequence, and a cell line comprising the vector. Methods
CC
    for screening for inhibitors of beta secretase activity are also given in
CC
    the invention. The human aspartase protein and nucleotide sequences and
CC
    the methods for identifying inhibitors of the protease, are useful in the
CC
    treatment of and research in to Alzheimer's disease
CC
XX
    Sequence 1804 BP; 397 A; 520 C; 458 G; 429 T; 0 U; 0 Other;
SO
                        100.0%; Score 1804; DB 3; Length 1804;
 Query Match
                        100.0%; Pred. No. 0;
  Best Local Similarity
                                                                Gaps
                                                                        0;
 Matches 1804; Conservative
                              0; Mismatches
                                                0;
                                                   Indels
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Qy
             1 ATGGGCGCACTGGCCCGGGCGCTGCTGCTGCTGCTGGCCCAGTGGCTCCTGCGGCGC 60
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Qу
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Db
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Qy
             121 CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGCGCCACGCCGACGCCTTG 180
Db
         181 GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCCAACTTCTTGGCCATG 240
Qу
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Qу	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
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Qу	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	661		720
Qу	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
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Qу	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Db	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
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Qу	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
Db	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
Qу	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080

Db	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Qу	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Db	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Qу	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
Db	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
Qy	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Db	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Qy	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
Db	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
Qу	1321	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1380
Db	1321	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1380
Qу	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440
Db	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440
Qу	1441	GCCATCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	1500
Db	1441	GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	1500
Qу	1501	CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA	1560
Db	1501	$\tt CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA$	1560
Qу	1561	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	1620
Db	1561	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	1620
Qу	1621	AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	1680
Db	1621	AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	1680
Qу	1681	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC	1740
Db	1681	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC	1740
Qу	1741	CTCCCTACTTCCAAGAAAAAAAAAAAAAAAAAAAAAAAA	1800
Db	1741	CTCCCTACTTCCAAGAAAAAAAAAAAAAAAAAAAAAAAA	1800
Qy	1801	AAAA 1804	
Db	1801	 AAAA 1804	

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AAS11701 standard; DNA; 1804 BP.
ID
XX
     AAS11701;
AC
XX
     24-OCT-2001 (first entry)
DΤ
XX
DΕ
     DNA encoding human aspartyl protease 1 (Asp-1).
XX
KW
     Human; aspartyl protease 1; Asp-1; nootropic; neuroprotective;
     aspartyl protease 2; Asp2; amyloid protein precursor; APP;
KW
KW
     beta-secretase; Alzheimer's disease; ds.
XX
OS
     Homo sapiens.
XX
FΗ
     Key
                     Location/Qualifiers
FT
     CDS
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FT
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                     /product= "Aspartyl protease-1 (Asp-1)"
FT
XX
    WO200149097-A2.
PN
XX
     12-JUL-2001.
PD
XX
     09-MAY-2001; 2001WO-IB000797.
PF
XX
     09-MAY-2001; 2001WO-IB000797.
PR
XX
     (BIEN/) BIENKOWSKI M J.
PΑ
     (GURN/) GURNEY M E.
PΑ
     (HEIN/) HEINRIKSON R L.
PA
PΑ
     (PARO/) PARODI L A.
PA
     (YANR/) YAN R.
XX
     Bienkowski MJ, Gurney ME, Heinrikson RL, Parodi LA, Yan R;
ΡI
XX
DR
     WPI; 2001-502548/55.
     P-PSDB; AAU07201.
DR
XX
     Novel purified polypeptide comprising fragment of mammalian aspartyl
PT
     protease 2, lacking Asp2 transmembrane domain and retaining beta
PT
     secretase activity of Asp2 useful for identifying inhibitors of Asp2
PT
PT
     activity.
XX
PS
     Example 2; Fig 1; 185pp; English.
XX
CC
     The invention relates to a novel purified polypeptide comprising a
     fragment of mammalian aspartyl protease 2 (Asp2) protein which lacks the
CC
CC
     Asp2 transmembrane domain and the Asp2 protein, and where the polypeptide
CC
     and the fragment retain the beta-secretase activity of the mammalian Asp2
CC
     protein. Also included is an isoform of amyloid protein precursor (APP)
CC
     comprising the amino acid sequence of a APP or its fragment containing an
CC
     APP cleavage site recognisable by a mammalian beta-secretase, and further
CC
     comprising two lysine residues at the carboxyl terminus of the amino acid
     sequence of the mammalian APP or APP fragment. The polypeptides are used
CC
     for assaying for modulators of beta-secretase activity; identifying
CC
     agents that inhibit the APP processing activity of human Asp2 aspartyl
CC
     protease (Hu-Asp2); identifying agents that modulate the activity of Asp2
CC
```

```
; and for reducing cellular production of amyloid beta (Abeta) from APP.
CC
   Agents identified by the above methods are useful for treating
CC
   Alzheimer's disease; and for identifying modulators of amyloid-beta
    (Abeta) peptide production, for use in designing therapeutics for the
CC
CC
    treatment or prevention of Alzheimer's disease. Probes and primers
   derived from Asp nucleic acid sequences are useful for detecting Hu-Asp
CC
   nucleic acids in in vitro assays and in Northern and Southern blots. The
CC
   present sequence represents the coding sequence of human Asp-1
CC
XX
    Sequence 1804 BP; 397 A; 520 C; 458 G; 429 T; 0 U; 0 Other;
SO
                    100.0%; Score 1804;
 Query Match
                                     DB 4;
                                          Length 1804;
 Best Local Similarity
                    100.0%;
                           Pred. No. 0;
                         0;
                            Mismatches
 Matches 1804; Conservative
                                                      Gaps
                                        0:
                                           Indels
                                                            0;
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Qу
           1 ATGGGCGCACTGCCCGGGCGCTGCTGCTGCTCTGCTGGCCCAGTGGCTCCTGCGCGCC 60
Db
        61 GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCTCCGGGTGGCCGCGGCCACGAAC 120
Qу
           61 GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCTCCGGGTGGCCGCGGCCACGAAC 120
Db
       121 CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGCGCCACGCCGACGCCTTG 180
Qу
           121 CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGACGCCCACGCCGACGCCTTG 180
Db
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Qу
           181 GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCGCCAACTTCTTGGCCATG 240
Db
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Qу
           301 CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA 360
Db
       361 ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC 420
Qy
           361 ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC 420
Db
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Qу
           Db
       421 AAGGGCTTTGACGTCACAGTGAAGTACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA 480
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Qy
           Dh
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Qy
           541 TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT 600
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       601 TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA 660
Qу
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CC

	Db	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
	QУ	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
	Db	661		720
	Qу	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
	Дb	721		780
	Qу	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
	Db	781		840
	QУ	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
	Db	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
	QУ	901	ATCGTGGACAGTGGCACCACGCTGCCGCCTGCCCCAGAAGGTGTTTGATGCGGTGGTG	960
	Db	901	ATCGTGGACAGTGGCACCACGCTGCTGCCCCAGAAGGTGTTTGATGCGGTGGTG	960
	QУ	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
	Db	961		1020
	Qу	1021	${\tt CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC}$	1080
	Db	1021		1080
·	QУ	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
	Db	1081		1140
	Qу	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
	Db	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
	Qy	1201	TCCACAAATGCGCTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
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	Qу	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
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	Qy	1321	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1380
	Db	1321		1380
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	Dh	1///1		1500

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          1501 CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA 1560
Db
      1561 GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC 1620
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          1561 GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC 1620
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Qу
          1621 AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT 1680
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Qу
          1681 GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC 1740
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      Qу
          Db
      1801 AAAA 1804
Qу
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    10-DEC-2001 (first entry)
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KW
    Alzheimer's disease; AD; dementia; neurofibrillary tangle; gliosis;
KW
    amyloid plaque; neuronal loss; proteolytic; nootropic; neuroprotective;
KW
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PA
XX
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    Bienkowkski MJ, Gurney M;
XX
DR
    WPI: 2001-444208/48.
DR
    P-PSDB: AAE10628.
XX
    Polypeptide comprising fragments of human aspartyl protease with amyloid
PT
    precursor protein processing activity and alpha-secretase activity, for
PT
    identifying modulators useful in treating Alzheimer's disease.
PT
XX
    Claim 30; Fig 1; 187pp; English.
PS
XX
    The patent discloses human aspartyl protease 1 (hu-Aspl) or modified Aspl
CC
    proteins which lack transmembrane domain or amino terminal domain or
CC
    cytoplasmic domain and retains alpha-secretase activity and amyloid
CC
    protein precursor (APP) processing activity. The proteins of the
CC
    invention are useful for assaying hu-Aspl alpha-secretase activity, which
CC
    in turn is useful for identifying modulators of hu-Asp1 alpha-secretase
CC
    activity, where modulators that increase hu-Asp1 alpha-secretase activity
CC
    are useful for treating Alzheimer's disease (AD) which causes progressive
CC
    dementia with consequent formation of amyloid plaques, neurofibrillary
CC
    tangles, gliosis and neuronal loss. Hu-Asp1 protease substrate is useful
CC
    for assaying hu-Asp1 proteolytic activity, by contacting hu-Asp1 protein
CC
    with the substrate under acidic conditions and determining the level of
CC
    hu-Aspl proteolytic activity. The present sequence is a cDNA encoding
CC
    human Aspl protein. Aspl gene is localised on chromosome 21
CC
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Db	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
Qy	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Qу	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
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Qy	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Db	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
QУ	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
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QУ	901	ATCGTGGACAGTGGCACCACGCTGCTGCGCCCCAGAAGGTGTTTGATGCGGTGGTG	960
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QУ		GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	
Db		GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	
QУ		CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA	
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QУ		GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	
Db		GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	
Qу		AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	
Db		AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	
Qу		GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC	
Db		GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC	
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ID AAD13020 standard; cDNA; 1804 BP.

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     23-OCT-2001 (first entry)
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     Human aspartyl protease 1 (Hu-Aspl) cDNA.
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     Human; aspartyl protease 1; Asp 1; beta-amyloid precursor protein; APP;
KW
     beta-secretase; Alzheimer's disease; dementia; amyloid plaque; gliosis;
KW
     neurofibrillary tangle; neuronal loss; amyloid-beta peptide; nootropic;
KW
     neuroprotective; antisense therapy; gene therapy; chromosome 21; ss.
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PA
     (GURN/) GURNEY M E.
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     (HEIN/) HEINRIKSON R L.
PA
PΑ
     (PARO/) PARODI L A.
PΑ
     (YANR/) YAN R.
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XX
DR
     WPI: 2001-483072/52.
     P-PSDB; AAE06858.
DR
XX
     Novel purified polypeptide comprising fragment of mammalian aspartyl
PT
     protease 2, lacking Asp2 transmembrane domain and retaining beta
PT
     secretase activity of Asp2 useful for identifying inhibitors of Asp2
PT
PT
     activity.
XX
     Example 2; Fig 1; 185pp; English.
PS
XX
     The invention relates to human aspartyl proteases (Hu-Asp), beta-amyloid
CC
     precursor protein (APP) isoforms and their corresponding DNA molecules.
CC
     Human aspartyl proteases can act as beta-secretase proteases useful for
CC
     treating Alzheimer's disease. APP isoforms are useful for identifying
CC
     modulators of amyloid-beta peptide production, for use in designing
CC
     therapeutics for the treatment and prevention of Alzheimer's disease,
CC
     dementia, formation of amyloid plaques, neurofibrillary tangles, gliosis
CC
```

and neuronal loss. APP isoforms are also used in methods for identifying

CC

```
inhibitors and modulators of human Asp2 activity. The invention relates
CC
    to a method for identifying agents that modulate the activity of human
CC
    aspartyl protease Asp2. Amyloid-beta peptides obtained from APP are used
CC
    as a means to screen in cellular assays for the inhibitors of beta- and
CC
    gamma- secretase. Hu-Asp DNA fragments are useful as probes or primers in
CC
   polymerase chain reactions (PCR). The probes are useful for detecting Hu-
CC
   Asp nucleic acids in in vitro assays and in Northern and Southern blots.
CC
   The present cDNA sequence encodes human aspartyl protease 1 (Hu-Asp1). Hu
CC
    -Asp 1 gene is localised on chromosome 21
CC
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                                      DB 4;
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Qу	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
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ΙD
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AC
XX
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XX
   Human; alpha-secretase; amyloid precursor protein; APP; therapy;
KW
   Alzheimer's disease; antialzheimer's; aspartyl protease 1; Asp 1;
KW
   beta-secretase; chromosome 21; ss.
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XX
    Gurney M, Bienkowski MJ;
PΙ
XX
    WPI; 2001-290516/30.
DR
    P-PSDB; AAE02580.
DR
XX
    Enzymes that cleave the alpha-secretase site of the amyloid precursor
PT
    protein, useful for the treatment of Alzheimer's disease.
PT
XX
    Example 2; Fig 1; 189pp; English.
PS
XX
    The present invention relates to enzymes for cleaving the alpha-
CC
    secretase site of the amyloid precursor protein (APP) and methods of
-CC
    identifying those enzymes. The methods may be used to identify enzymes
CC
    that may be used to cleave the alpha-secretase cleavage site of the APP
CC
    protein. The enzymes may be used to treat or modulate the progress of
CC
    Alzheimer's disease. The present sequence is human aspartyl protease 1
CC
    (Asp 1) cDNA. Asp 1 has alpha-secretase protease and beta-secretase
CC
    protease activities. Asp 1 gene is located on chromosome 21
CC
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QУ	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Qу	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Db	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Qу		GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	
Db		GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	
Qу		TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	
Db		${\tt TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC}$	
Qу		ATCGTGGACAGTGGCACCACGCTGCTGCGCCCCAGAAGGTGTTTGATGCGGTGGTG	
Db		ATCGTGGACAGTGGCACCACGCTGCCCCCAGAAGGTGTTTGATGCGGTGGTG	
Qу		GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	
Db		GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	
Qу		CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	
Db		CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	
Qу	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140

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1081 TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC 1140
Db
      1141 ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA 1200
QУ
         1141 ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA 1200
Db
      1201 TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC 1260
Qу
         1201 TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC 1260
Db
      1261 AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA 1320
Qу
         1261 AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA 1320
Db
      1321 GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT 1380
Qу
         1321 GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT 1380
Db
      1381 CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA 1440
Qу
         1381 CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA 1440
Db
      1441 GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC 1500
Qу
         1441 GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC 1500
Db
      1501 CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA 1560
Qу
         1501 CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA 1560
Db
      1561 GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC 1620
Qу
         1561 GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC 1620
Db
      1621 AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT 1680
Qу
         1621 AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT 1680
Db
      1681 GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC 1740
Qу
         1681 GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC 1740
Db
      Qу
         Db
      1801 AAAA 1804
Qy
         1111
      1801 AAAA 1804
Db
```

## RESULT 6

ID AAS11516 standard; cDNA; 1804 BP.

XX

AC AAS11516;

XX

```
DT
     24-OCT-2001 (first entry)
XX
DΕ
     Human cDNA encoding Aspartyl protease 1 (Asp1).
XX
KW
     Human; Aspartyl protease; Asp1; Asp2; beta-secretase; nootropic;
KW
     neuroprotective; amyloid protein precursor; APP; Alzheimer's disease;
KW
     amyloid-beta; Abeta; ss.
XX
OS
     Homo sapiens.
XX
FΗ
                     Location/Qualifiers
     Kev
                     1. .1557
FT
     CDS
                     /*tag= a
FT
                     /product= "Asp1"
FT
XX
PN
     WO200149098-A2.
XX
PD
     12-JUL-2001.
XX
PF
     09-MAY-2001; 2001WO-IB000798.
XX
     09-MAY-2001; 2001WO-IB000798.
PR
XX
     (BIEN/) BIENKOWSKI M J.
PΑ
     (GURN/) GURNEY M E.
PΑ
     (HEIN/) HEINRIKSON R L.
PA
     (PARO/) PARODI L A.
PΑ
PΑ
     (YANR/) YAN R.
XX
PΙ
     Bienkowski MJ, Gurney ME, Heinrikson RL, Parodi LA, Yan R;
XX
DR
     WPI; 2001-502549/55.
     P-PSDB; AAU06602.
DR
XX
PT
     Novel purified polypeptide comprising fragment of mammalian aspartyl
PT
     protease 2, lacking Asp2 transmembrane domain and retaining beta
PT
     secretase activity of Asp2 useful for identifying inhibitors of Asp2
PT
     activity.
XX
PS
     Example 2; Fig 1; 185pp; English.
XX
CC
     The invention relates to a purified polypeptide comprising a fragment of
CC
     mammalian aspartyl protease (Asp)2 protein which lacks the Asp2
CC
     transmembrane domain and the Asp2 protein, and where the polypeptide and
CC
     the fragment retain the beta-secretase activity of the mammalian Asp2
CC
     protein. The invention also details polynucleotides for the Asp proteins
CC
     and vectors expressing them, and a polypeptide (isoform of amyloid
CC
     protein precursor (APP)) comprising the amino acid sequence of an APP or
CC
     its fragment containing an APP cleavage site recognizable by a mammalian
CC
     beta-secretase, and further comprising two lysine residues at the
CC
     carboxyl terminus of the amino acid sequence of the mammalian APP or APP
CC
     fragment. Also included in the invention are methods of identifying
CC
     modulators or inhibitors of Asp2. Modulators and inhibitors of Asp2 are
CC
     useful for treating Alzheimer's disease. APP is useful in methods for
CC
     identifying inhibitors or modulators of human Asp2 activity and amyloid-
CC
     beta (Abeta) peptide production. APP is also useful in designing
CC
     therapeutics for the treatment or prevention of Alzheimer's disease. APP
```

```
comprising the APP-Sw-beta-secretase peptide sequence (NLDA), which is
CC
    associated with increased levels of Abeta processing is useful in assays
CC
    relating the Alzheimer's research. The expression vector is useful for
CC
    recombinantly expressing APP. Nucleic acids that hybridise to Asp
CC
    oligonucleotides are useful as probes or primers. The probes are useful
CC
    for detecting Hu-Asp nucleic acids in in vitro assays and in Northern and
CC
    Southern blots. The present sequence encodes human Asp1
CC
XX
SQ
    Sequence 1804 BP; 397 A; 520 C; 458 G; 429 T; 0 U; 0 Other;
 Query Match
                    100.0%; Score 1804;
                                     DB 4;
                                          Length 1804;
                    100.0%;
                           Pred. No. 0;
 Best Local Similarity
                                                            0:
                            Mismatches
 Matches 1804; Conservative
                          0;
                                        0:
                                           Indels
                                                   0:
                                                      Gaps
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Qу
           1 ATGGGCGCACTGGCCGGGCGCTGCTGCTGCCTGCTGGCCCAGTGGCTCCTGCGCGCC 60
Db
        61 GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCTCCGGGTGGCCGCGGCCACGAAC 120
QУ
           61 GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCCTCCGGGTGGCCGCGCCACGAAC 120
Db
       121 CGCGTAGTTGCGCCCACCCCGGGACCCCGGGACCCCTGCCGACGCCCACGCCGACGCTTG 180
Qy
           121 CGCGTAGTTGCGCCCACCCCGGGACCCCGGGACCCCTGCCGAGCGCCACGCCGACGCCTTG 180
Db
       181 GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCCAACTTCTTGGCCATG 240
Qγ
           181 GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCCAACTTCTTGGCCATG 240
Db
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Qу
           241 GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC 300
Db
        301 CCCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA 360
Qу
           301 CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA 360
Db
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Qу
           361 ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC 420
Db
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Qу
           421 AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA 480
Db
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Qу
           481 GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTTCTTGTCAACATTGCCACTATT 540
Db
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QУ
           541 TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT 600
Db
        601 TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA 660
Qу
           601 TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA 660
Db
```

QУ	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Qy	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Db	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
QУ	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Db	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Qу	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
Db	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
QУ	901	ATCGTGGACAGTGGCACCACGCTGCTGCGCCCAGAAGGTGTTTGATGCGGTGGTG	960
Db	901	ATCGTGGACAGTGGCACCACGCTGCTGCGCCCCAGAAGGTGTTTGATGCGGTGGTG	960
Qу	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
Db	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
QУ	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Db	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Qу	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Db ·	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
QУ	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
Db	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
Qу	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Db	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
QУ	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
Db	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
QУ	1321	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1380
Db	1321		1380
QУ	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440
Db	1381		1440
Qу	1441	GCCATCCTCGTTGTCTTAATCGTCCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	1500
Dh	1441		1500

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Qу
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           Db
       1501 CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA 1560
       1561 GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC 1620
Qу
           1561 GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC 1620
Db
       1621 AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT 1680
Qу
           1621 AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT 1680
Db
       1681 GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC 1740
Qу
          1681 GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC 1740
Db
      Qу
           Db
       1801 AAAA 1804
Qу
          1801 AAAA 1804
Db
RESULT 7
ABL52456
   ABL52456 standard; cDNA; 1804 BP.
XX
AC
   ABL52456;
XX
DT
   16-JUL-2002 (first entry)
XX
DΕ
   Human Asp-1 nucleotide sequence SEQ ID NO:1.
XX
KW
   Human; Asp-1; Asp-2; aspartyl protease; enzyme; Alzheimer's disease;
KW
   proteolytic; chromosome 21; gene; ss.
XX
os
   Homo sapiens.
XX
FH
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FT
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FT
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                /product= "Asp-1"
FT
FT
                /note= "aspartyl protease"
XX
PN
   GB2367060-A.
XX
PD
   27-MAR-2002.
XX
PF
   29-OCT-2001; 2001GB-00025934.
XX
PR
   23-SEP-1999;
               99US-00404133.
PR
   23-SEP-1999;
               99US-0155493P.
PR
   23-SEP-1999;
               99WO-US020881.
PR
   13-OCT-1999;
               99US-00416901.
PR
   06-DEC-1999;
               99US-0169232P.
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```
PR
    22-SEP-2000; 2000GB-00023315.
XX
PΑ
     (PHAA ) PHARMACIA & UPJOHN CO.
XX
PΙ
    Bienkowkski MJ, Gurney M;
XX
DR
    WPI; 2002-397167/43.
    P-PSDB; ABB78589.
DR
XX
PT
    Human aspartyl protease 1 substrates useful in assays to detect aspartyl
PT
    protease activity, e.g. for the diagnosis of Alzheimer's disease.
XX
    Claim 8; Fig 1; 182pp; English.
PS
XX
    The present invention describes a human aspartyl protease 1 (hu-Asp1)
CC
CC
    substrate (I) which comprises a peptide of no more than 50 amino acids,
    and which comprises the 8 amino acid sequence Gly-Leu-Ala-Leu-Ala-Leu-
CC
    Glu-Pro. Also described are: (1) a method (II) for assaying hu-Asp1
CC
CC
    proteolytic activity, comprising: (a) contacting a hu-Asp1 protein with
    (I) under acidic conditions; and (b) determining the level of hu-Asp1
CC
CC
    proteolytic activity; (2) a purified polynucleotide (III) comprising a
CC
    nucleotide sequence that hybridises under stringent conditions to the non
    -coding strand complementary to a defined 1804 nucleotide sequence (see
CC
CC
    ABL52456) where the nucleotide sequence encodes a polypeptide having Aspl
    proteolytic activity and lacks nucleotides encoding a transmembrane
CC
CC
    domain); (3) a purified polynucleotide (III') comprising a sequence that
CC
    hybridises under stringent conditions to (III) (the nucleotide sequence
CC
    encodes a polypeptide further lacking a pro-peptide domain corresponding
CC
    to amino acids 23-62 of hu-Asp1 (see ABB78589)); (4) a vector (IV)
CC
    comprising (III) or (III'); and (5) a host cell (V) transformed or
CC
    transfected with (III), (III') and/or (IV). The hu-Aspl protease
CC
    substrate (I) may be used as an enzyme substrate in assays to detect
CC
    aspartyl protease activity, (II) and therefore diagnose diseases
CC
    associated with aberrant hu-Asp1 expression and activity such as
CC
    Alzheimer's disease. Hu-Aspl has been localised to chromosome 21, while
CC
    hu-Asp2 has been localised to chromosome 11q23.3-24.1. The present
CC
    sequence encodes hu-Asp1 from the present invention
XX
SQ
    Sequence 1804 BP; 397 A; 520 C; 458 G; 429 T; 0 U; 0 Other;
 Query Match
                        100.0%; Score 1804; DB 6; Length 1804;
 Best Local Similarity
                        100.0%; Pred. No. 0;
 Matches 1804; Conservative
                               0; Mismatches
                                                0;
                                                    Indels
                                                                 Gaps
                                                                         0;
Qу
           1 ATGGGCGCACTGGCCCGGGCGCTGCTGCTGCTCTGCTGGCCCAGTGGCTCCTGCGGCGCC 60
             1 ATGGGCGCACTGGCCCGGGCGCTGCTGCTGCTCTGCTGGCCCAGTGGCTCCTGCGCGCC 60
Db
Qy
          61 GCCCGGAGCTGGCCCCCGCGCCCTTCACGCTGCCCCTCCGGGTGGCCGCGGCCACGAAC 120
             Db
          61 GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCTCCGGGTGGCCGCGGCCACGAAC 120
Qу
         121 CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGCGCCACGCCGACGCCTTG 180
             121 CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGGCCCACGCCGACGCCTTG 180
Db
Qу
         181 GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCAACTTCTTGGCCATG 240
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Db	181	GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCCAACTTCTTGGCCATG	240
Qу	241	GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC	300
Db	241	GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC	300
Ωу	301	CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA	360
Db	301	CCCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA	360
Qу	361	ACCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	420
Db	361	ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	420
Qу	421	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	480
Db	421	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	480
Qу	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
Db	481		540
Qу	541	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	600
Db	541	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	600
Q <b>y</b>	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
Db	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
Qу		CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	
Db		CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	
Qу		GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	
Db		GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	
Qу		GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	
Db		GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	
QУ		TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	
Db		TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	
QУ		ATCGTGGACAGTGGCACCACGCTGCTGCCCCAGAAGGTGTTTGATGCGGTGGTG	
Db		ATCGTGGACAGTGGCACCACGCTGCTGCCCCAGAAGGTGTTTGATGCGGTGGTG	
Qу		GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	
Db		GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	
Qу	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080

מע	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Qу	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Db	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Qу	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
Db	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
Qу	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Db	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Qу	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
Db	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
Qу	1321	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1380
Db	1321	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1380
Qу	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440
Db	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440
Qу	1441	GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	1500
Db	1441	GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	1500
Qу	1501	CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA	1560
Db	1501	CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA	1560
Qу	1561	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	1620
Db	1561	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	1620
Qу	1621	AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	1680
Db	1621	AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	1680
QУ	1681	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC	1740
Db	1681	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC	1740
Qу	1741	CTCCCTACTTCCAAGAAAAATAATTAAAAAAAAAAACTTCATTCTAAACCAAAAAA	1800
Db	1741	CTCCCTACTTCCAAGAAAAAAAAAAAAAAAAAAAAAAAA	1800
Qу	1801	AAAA 1804	
Db	1801	AAAA 1804	

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AAZ34056 standard; cDNA; 1879 BP.
ID
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AC
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XX
DΤ
     07-DEC-1999
                   (first entry)
XX
     Human PRO852 nucleotide sequence.
DE
XX
KW
     Human; PRO; EST; expressed sequence tag; PCR primer; hybridisation;
KW
     probe; blood coagulation disorder; cancer; cellular adhesion disorder;
     secreted protein; transmembrane protein; ss.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO9946281-A2.
XX
PD
     16-SEP-1999.
XX
PF
     08-MAR-1999;
                     99WO-US005028.
XX
PR
     10-MAR-1998;
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     (GETH ) GENENTECH INC.
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DR
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P-PSDB; AAY41714.
DR
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PT
    New secreted and transmembrane polypeptides and their polynucleotides,
PT
    useful for treating blood coagulation disorders, cancers and cellular
    adhesion disorders.
PT
XX
PS
    Claim 2; Fig 72; 530pp; English.
XX
CC
    The present invention describes secreted and transmembrane polypeptides
CC
    and their polynucleotides. The nucleotide sequences are useful as sources
CC
    of probes, primers, for chromosome mapping, and for generation of
    antisense sequences. They can also be used to create transgenic animals.
CC
CC
    The proteins can be used to treat a variety of diseases and disorders,
    depending on their function. Diseases that may be treated include blood
CC
CC
    coagulation disorders, cancers and cellular adhesion disorders. They may
    also be used to raise antibodies. AAZ33891 to AAZ34338, and AAY41685 to
CC
CC
    AAY41774 represent polynucleotide and polypeptide sequence given in the
CC
    exemplification of the present invention
XX
SO
    Sequence 1879 BP; 388 A; 559 C; 498 G; 434 T; 0 U; 0 Other;
                     98.9%;
                            Score 1784.4;
                                        DB 2; Length 1879;
 Query Match
                     99.9%;
 Best Local Similarity
                            Pred. No. 0;
 Matches 1785; Conservative
                           0; Mismatches
                                          1;
                                             Indels
                                                      0;
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Qу
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Qy
           214 CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGCGCCACGCCGACGCTTG 273
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QУ	541	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	600
Db	634		693
Qy	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
Db	694	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	753
Qу	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	754	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	813
QУ	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Db	814	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	873
Qу	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Db	874	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	933
Qу	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
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QУ	901	ATCGTGGACAGTGGCACCACGCTGCTGCGCCCAGAAGGTGTTTGATGCGGTGGTG	960
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Qу	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
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Qу	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
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Qy	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
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Qу	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
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    08-FEB-2001
              (first entry)
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KW
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    expressed sequence tag; detection; cancer; ss.
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    WPI; 2000-611443/58.
    P-PSDB; AAB44270.
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PΤ
    Novel PRO polypeptides and polynucleotides used in detection methods, to
    target bioactive molecules to specific cells, and to modulate cellular
PT
PT
    activities.
XX
PS
    Claim 2; Fig 72; 636pp; English.
XX
CC
    AAC78458 to AAC78599 represent polynucleotide and EST (expressed sequence
CC
    tag) sequences which encode secreted or transmembrane PRO polypeptides.
CC
    The PRO polynucleotides and polypeptides have cytostatic activity. The
CC
    polynucleotides and polypeptides can be used for detecting the presence
CC
    of PRO polypeptides in samples, for linking bioactive molecules to cells
CC
    and for modulating biological activities of cells, using the polypeptides
CC
    for specific targeting. The polypeptide targeting can be used to kill the
CC
    target cells, e.g. for the treatment of cancers. The polypeptide pairs
CC
    provide specific targeting of bioactive molecules to cells. AAC78600 to
    AAC78987 represent PCR primers and probes used in the isolation of the
CC
CC
    PRO polynucleotide sequences
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 Query Match
                        98.9%; Score 1784.4; DB 3; Length 1879;
 Best Local Similarity
                        99.9%;
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 Matches 1785; Conservative
                               0; Mismatches
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          61 GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCTCCGGGTGGCCGCGGCCACGAAC 120
Qу
             Db
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Qу	181	GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCCAACTTCTTGGCCATG	240
Db	274	GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCAACTTCTTGGCCATG	333
Qу	241	GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC	300
Db	334	GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC	393
Qу	301	CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA	360
Db	394	CCCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA	453
Qy	361	ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	420
Db	454	ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	513
Qу	421	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	480
Db	514	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	573
QУ	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
Db	574	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	633
Qу	541	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	600
Db	634	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	693
Qу	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
Db	694	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	753
Qy	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	754	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	813
Qу	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Db	814	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	873
Qу	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Db	874	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	933
QУ	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
Db	934	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	993
Qу	901	ATCGTGGACAGTGGCACCACGCTGCTGCGCCCCAGAAGGTGTTTGATGCGGTGGTG	960
Db	994		1053

QУ	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
Db	1054		1113
Qу	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Db	1114	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1173
Qy	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Db	1174	TACCTGAGAGACGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1233
Qy	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
Db	1234	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1293
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Db		${\tt TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC}$	
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Db		AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	
Qу		GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	
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Qy		CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	
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QУ		GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	
Db		GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	
QУ		CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA	
Db		CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA	
QУ		GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	
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ДУ		AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	
Db		GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC	
Qу		GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC	
Db		CTCCCTACTTCCAAGAAAATAATTAAAAAAAAAACTTCATTCTAA 1786	_ <b>v</b> • -
Ολ		CTCCCTACTICCAAGAAAATAATTAAAAAAAAACTICATTCTTT 1700	
Db	⊥034	CICCLIMCTICCWGGWWWWTTUTTIAAAAWWWGITOWTTOTTAL TO 12	

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RESULT 10
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ID
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     AAS45960;
XX
DT
     18-DEC-2001 (first entry)
XX
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DE
XX
KW
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K₩
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    Baker KP, Chen J, Desnoyers L, Goddard A, Godowski PJ, Gurney AL;
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    Pan J, Smith V, Watanabe CK, Wood WI, Zhang Z;
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    WPI; 2001-602746/68.
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    P-PSDB; AAU29059.
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    Novel nucleic acids encoding PRO polypeptides, used to diagnose the
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    presence of tumors, such as prostate and breast tumors, in mammals and to
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    screen for modulators of the compounds.
PT
XX
    Claim 2; Fig 71; 774pp; English.
PS
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    Sequences AAS45925-AAS46231 represent DNA molecules encoding and PCR
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    primers for PRO polypeptides of the invention. The sequences of the
CC
    invention can be used to detect the presence of a tumour in a mammal by
CC
    comparing the level of expression of a PRO polypeptide in a test sample
CC
    of cells from the animal and a control sample of normal cells, whereby a
CC
    higher level of expression in the test sample indicates the presence of a
CC.
CC
    tumour in the mammal. Mammals include dogs, cats, cattle, horses, sheep,
    pigs, goats and rabbits but are preferably human. The polypeptides can be
CC
    used to stimulate tumour necrosis factor (TNF) alpha release from human
CC
    blood, when contacted with it. A specific polypeptide can be used to
CC
    stimulate the proliferation or differentiation of chondrocyte cells. The
CC
    PRO proteins can be used to determine the presence of tumours and also
CC
    susceptibility to tumour development, particularly adrenal, lung, colon,
CC
    breast, prostate, rectal, cervical, or liver tumours, in mammalian
CC
    subjects. The oligonucleotide probes specific for the PRO nucleic acids
CC
    can be used for genetic analysis of individuals with genetic disorders
CC
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## RESULT 11 ABX78563

ID ABX78563 standard; cDNA; 1879 BP.

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AND USES
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; PRIOR FILING DATE: 1999-09-23
; PRIOR APPLICATION NUMBER: US 09/404,133
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           1801 AAAA 1804
Db
RESULT 2
US-09-548-367D-1
; Sequence 1, Application US/09548367D
; Patent No. 6440698
; GENERAL INFORMATION:
  APPLICANT: GURNEY ET AL.
  TITLE OF INVENTION: ALZHEIMER'S DISEASE SECRETASE, APP SUBSTRATES THEREFOR
AND USES
  TITLE OF INVENTION: THEREOF
  FILE REFERENCE: 29915/6280H
  CURRENT APPLICATION NUMBER: US/09/548,367D
  CURRENT FILING DATE: 2000-04-12
  PRIOR APPLICATION NUMBER: US 60/155,493
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: US 09/404,133
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: PCT/US99/20881
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: US 60/101,594
  PRIOR FILING DATE: 1998-09-24
  NUMBER OF SEQ ID NOS: 73
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
   LENGTH: 1804
   TYPE: DNA
   ORGANISM: Homo sapiens
US-09-548-367D-1
                    100.0%; Score 1804; DB 4; Length 1804;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 0;
                        0; Mismatches
 Matches 1804; Conservative
                                        0; Indels
                                                      Gaps
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QУ	61	GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCCTCCGGGTGGCCGCGCCACGAAC	120
Db	61	GCCCGGAGCTGGCCCCCGCGCCCTTCACGCTGCCCCTCCGGGTGGCCGCGCCACGAAC	120
Qу	121	CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGCGCCACGCCGACGGCTTG	180
Db	121	CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGCGCCACGCCGACGCCTTG	180
Qy	181	GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCCAACTTCTTGGCCATG	240
Db	181	GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCAACTTCTTGGCCATG	240
Qy	241	GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC	300
Db	241	GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC	300
Qу	301	CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA	360
Db	301	CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA	360
Qу	361	ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	420
Db	361	ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	420
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Qу	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
Db	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
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Db		TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	
Qу		TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	
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Qу		CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	
Db		CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	
ДУ		GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	
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Qу		GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	
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Db	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
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Db	901	ATCGTGGACAGTGGCACCACGCTGCTGCGCCCCAGAAGGTGTTTGATGCGGTGGTG	960
Qу	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
Db	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
Qу	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Db	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Qу	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Db	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Qу	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
Db	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
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Db	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Qу	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
Db	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
Qу	1321	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1380
Db	1321	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1380
QУ	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440
Db	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440
Qу	1441	GCCATCCTCGTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	1500
Db	1441	GCCATCCTTGTCTTAATCGTCCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	1500
Qу	1501	CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA	1560
Db	1501	$\tt CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA$	1560
Qу	1561	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	1620
Db	1561	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	1620
Qу	1621	AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	1680
Db	1621	AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	1680
Qу	1681	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC	1740

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       Qу
           Db
       1801 AAAA 1804
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           111
Db
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US-09-551-853D-1
; Sequence 1, Application US/09551853D
; Patent No. 6500667
; GENERAL INFORMATION:
  APPLICANT: GURNEY ET AL.
  TITLE OF INVENTION: ALZHEIMER'S DISEASE SECRETASE, APP SUBSTRATES THEREFOR
AND USES
  TITLE OF INVENTION: THEREOF
  FILE REFERENCE: 29915/6280L
  CURRENT APPLICATION NUMBER: US/09/551,853D
  CURRENT FILING DATE: 2000-04-18
  PRIOR APPLICATION NUMBER: US 60/155,493
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: US 09/404,133
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: PCT/US99/20881
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: US 60/101,594
  PRIOR FILING DATE: 1998-09-24
  NUMBER OF SEQ ID NOS: 73
  SOFTWARE: PatentIn version 3.1
 SEO ID NO 1
   LENGTH: 1804
   TYPE: DNA
   ORGANISM: Homo sapiens
US-09-551-853D-1
 Query Match
                    100.0%; Score 1804; DB 4;
                                          Length 1804;
                    100.0%; Pred. No. 0;
 Best Local Similarity
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 Matches 1804; Conservative
                         0; Mismatches
                                       0:
                                          Indels
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           1 ATGGGCGCACTGGCCCGGGCGCTGCTGCTGCCTCTGCTGGCCCAGTGGCTCCTGCGCGCC 60
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Qу
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Db	241	GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC	300
Qу	301	CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA	360
. Db	301	CCCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA	360
Qу	361	ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	420
Db	361	ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	420
Qу	421	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	480
Db	421	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	480
Qу	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
Db	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
Qу	541	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	600
Db	541	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATACTTGGCCTAGCT	600
Qy	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
Db	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
Qу	661	CAAGCAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Qy	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
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Qy	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
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Qy	901	ATCGTGGACAGTGGCACCACGCTGCTGCGCCCAGAAGGTGTTTGATGCGGTGGTG	960
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Db	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080

ДУ		TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	
Db		TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	
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Db	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Qу	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
Db	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
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Db	1561	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	1620
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Db	1801	AAAA 1804	

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; Patent No. 6635748
 GENERAL INFORMATION:
  APPLICANT: Giese, Klaus
  APPLICANT: Xin, Hong
  TITLE OF INVENTION: METASTATIC BREAST AND COLON CANCER REGULATED GENES
  FILE REFERENCE: 1451.100 / 210030.447
  CURRENT APPLICATION NUMBER: US/09/215,450
  CURRENT FILING DATE: 1998-12-17
  NUMBER OF SEQ ID NOS: 27
  SOFTWARE: FastSEQ for Windows Version 3.0
 SEO ID NO 18
  LENGTH: 1873
   TYPE: DNA
   ORGANISM: human
US-09-215-450-18
                          Score 1768.2; DB 4; Length 1873;
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                    98.0%;
 Best Local Similarity
                    99.8%;
                          Pred. No. 0;
 Matches 1770; Conservative
                         0; Mismatches
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           281 GCGCTCGCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCCAACTTCTTGGCCATG 340
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           581 GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT 640
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Qу
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Qу	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
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Qу	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Db	821	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	880
Qу	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
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Qу	901	ATCGTGGACAGTGGCACCACGCTGCTGCGCCCCAGAAGGTGTTTGATGCGGTGGTG	960
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Qу	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
Db	1061	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1120
Qу		CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	
Db		CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	
Qу	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
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QУ		TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	
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Qу	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
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Db		GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	
QУ	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440

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           Db
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RESULT 5
US-08-999-723-1
; Sequence 1, Application US/08999723A
; Patent No. 6025180
; GENERAL INFORMATION:
  APPLICANT: Powell, David J.
  APPLICANT: Southan, Christopher
  APPLICANT: Chapman, Conrad G.
  APPLICANT: Evans, Joanne R.
  TITLE OF INVENTION: ASP1
  FILE REFERENCE: GH70262
  CURRENT APPLICATION NUMBER: US/08/999,723A
  CURRENT FILING DATE: 1997-10-06
  NUMBER OF SEQ ID NOS: 2
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
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   TYPE: DNA
   ORGANISM: Homo sapiens
US-08-999-723-1
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 Best Local Similarity
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Qу
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Qy	181	GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCAACTTCTTGGCCATG	240
Db	271	GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCAACTTCTTGGCCATG	330
QУ	241	GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC	300
Db	331	GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC	390
Qу	301	CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA	360
Db	391	$\tt CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA$	450
Qу	361	ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	420
Db	451	ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	510
Qу	421	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	480
Db	511	${\tt AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA}$	570
Qу	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
Db	571	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	630
Qy		TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	600
Db		${\tt TTTG\_AATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT}$	690
Qу		TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	
Db	691	${\tt TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA}$	750
Qу	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	751	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCT	810
Qу	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Db	811	${\tt GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA}$	870
Qу	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Db	871	GGAGACATCTGGTATACCĆCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	930
Qу		TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	
Db	931	${\tt TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC}$	990
Qу	901	ATCGTGGACAGTGGCACCACGCTGCCGCCTGCCCCAGAAGGTGTTTGATGCGGTGGTG	960

Db	991	${\tt ATCGTGGACAGTGGCACCACGCTGCTGCGCCCAGAAGGTGTTTGATGCGGTGGTG}$	1050
Qу	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
Db	1051	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1110
Qу	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Db	1111	${\tt CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC}$	1170
Qу	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Db	1171	TACCTGAGAGACGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1230
Qу	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
Db	1231	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1290
Qу	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Db	1291	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1350
Qу	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
Db	1351	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1410
Qу	1321	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1380
Db	1411		1470
Qу	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440
Db	1471	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1530
Qу	1441	GCCATCCTCGTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	1500
Db	1531	GCCATCCTCGTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	1590
QУ	1501	CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA	1560
Db	1591	CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA	1650
Qy	1561	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	1620
Db	1651	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	1710
Qy	1621	AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	1680
Db	1711	AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	1770
Qу	1681	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC	1740
Db	1771	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC	1830
Qу	1741	CTCCCTACTTCCAAGAAAATAATTAAAAAAA 1772	
Db	1831	CTCCCTACTTCCAAGAAAAAAAAAAAAAAAAA 1862	

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RESULT 6
US-09-434-427-1
; Sequence 1, Application US/09434427
; Patent No. 6162630
; GENERAL INFORMATION:
  APPLICANT: POWELL, DAVID J.
  APPLICANT: SOUTHAN, CHRISTOPHER
  APPLICANT: CHAPMAN, CONRAD G.
  APPLICANT: EVANS, JOANNE R.
  TITLE OF INVENTION: ASP1
  FILE REFERENCE: GH-70262-D1
  CURRENT APPLICATION NUMBER: US/09/434,427
  CURRENT FILING DATE: 1999-11-04
  EARLIER APPLICATION NUMBER: US 08/999,723
  EARLIER FILING DATE: 1997-10-06
  EARLIER APPLICATION NUMBER: UK 9626022.9
  EARLIER FILING DATE: 1996-12-14
  NUMBER OF SEQ ID NOS: 2
  SOFTWARE: FastSEQ for Windows Version 3.0
 SEQ ID NO 1
   LENGTH: 1862
   TYPE: DNA
   ORGANISM: HOMO SAPIENS
US-09-434-427-1
                     97.9%; Score 1765.6; DB 3; Length 1862;
 Query Match
 Best Local Similarity 99.8%;
                           Pred. No. 0;
 Matches 1768; Conservative
                          0; Mismatches
                                            Indels
                                                    0;
                                                       Gaps
                                                              0;
         1 ATGGGCGCACTGCCCGGGCGCTGCTGCTGCTGCTGCCCAGTGGCTCCTGCGCGCC 60
Qу
           91 ATGGGCGCACTGGCCCGGGCGCTGCTGCTGCTCTGCTGGCCCAGTGGCTCCTGCGCGCC 150
Db
         61 GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCCTCCGGGTGGCCGCGGCCACGAAC 120
Qу
           151 GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCCTCCGGGTGGCCGCGGCCACGAAC 210
Db
        121 CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGGCCCACGCCGACGGCTTG 180
Qу
           211 CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGCGCCACGCCGACGCCTTG 270
Db
        181 GCGCTCGCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCCAACTTCTTGGCCATG 240
Qу
           271 GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCAACTTCTTGGCCATG 330
Db
        241 GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC 300
Qу
           331 GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC 390
Db
        301 CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA 360
Qу
           391 CCCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA 450
Db
        361 ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC 420
Qу
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Db	451	${\tt ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC}$	510
Qy	421	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	480
Db	511	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	570
Qy	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
Db	571	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	630
Qу	541	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	600
Db	631	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	690
Qу	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
Db	691	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	750
Qу	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	751	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	810
QУ	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Db	811	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	870
Qy	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Db	871	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	930
QУ	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
Db	931	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	990
Qу	901	ATCGTGGACAGTGGCACCACGCTGCTGCGCCTGCCCCAGAAGGTGTTTGATGCGGTGGTG	960
Db	991	ATCGTGGACAGTGGCACCACGCTGCTGCCCCAGAAGGTGTTTGATGCGGTGGTG	1050
Qy	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
Db	1051	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1110
Qу	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Db	1111	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1170
Qу	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Db	1171	TACCTGAGAGACGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1230
Qy	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
Db	1231	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1290
Qy	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Db	1291	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1350

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1261 AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA 1320
Qу
          1351 AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA 1410
Db
      1321 GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT 1380
Qу
          1411 GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT 1470
Db
      1381 CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA 1440
Qу
          1471 CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA 1530
Db
      1441 GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC 1500
Qу
          1531 GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC 1590
Db
      1501 CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA 1560
Qу
          1591 CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA 1650
Db
      1561 GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC 1620
Qу
          1651 GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC 1710
Db
      1621 AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT 1680
Qy
          1711 AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT 1770
Db
      1681 GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC 1740
Qу
          1771 GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC 1830
Db
      1741 CTCCCTACTTCCAAGAAAAATAATTAAAAAAA 1772
Qу
          1831 CTCCCTACTTCCAAGAAAAAAAAAAAAAAAAA 1862
Db
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#### RESULT 7

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US-09-215-450-1
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- ; Sequence 1, Application US/09215450
- ; Patent No. 6635748
- ; GENERAL INFORMATION:
- ; APPLICANT: Giese, Klaus
- ; APPLICANT: Xin, Hong
- ; TITLE OF INVENTION: METASTATIC BREAST AND COLON CANCER REGULATED GENES
- ; FILE REFERENCE: 1451.100 / 210030.447
- ; CURRENT APPLICATION NUMBER: US/09/215,450
- ; CURRENT FILING DATE: 1998-12-17
- ; NUMBER OF SEQ ID NOS: 27
- ; SOFTWARE: FastSEQ for Windows Version 3.0
- ; SEQ ID NO 1
- ; LENGTH: 2429
- ; TYPE: DNA
- ; ORGANISM: human

US-09-215-450-1

Query Match 82.0%; Score 1478.6; DB 4; Length 2429; Best Local Similarity 99.4%; Pred. No. 0; 0; Matches 1484; Conservative 0: Mismatches 9; Indels 0; Gaps 305 CGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGAACCC 364 Qу 213 CTCACCAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGCAGGAAACCC 272 Db 365 CGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCCAAGG 424 Qу 273 CGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCCAAGG 332 Db 425 GCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAAGACC 484 Qу 333 GCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAAGACC 392 Db 485 TCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATTTTTG 544 Qу 393 TCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATTTTTG 452 Db 545 AATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCTTATG 604 Qу 453 AATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCTTATG 512 Db 605 CCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACACAAG 664 Qу 513 CCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACACAAG 572 Db 665 CAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCTGGAT 724 Qy 573 CAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCTGGAT 632 Db 725 CTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAAGGAG 784 Qу 633 CTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAAGGAG 692 Db 785 ACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAATTGG 844 Qу 693 ACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAATTGG 752 Db 845 AAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCCATCG 904 Qу 753 AAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCCATCG 812 Db 905 TGGACAGTGGCACCACGCTGCTGCGCCCAGAAGGTGTTTGATGCGGTGGTGGAAG 964 Qу 813 TGGACAGTGGCACCACGCTGCTGCGCCTGCCCCAGAAGGTGTTTGATGCGGTGGTAGAAG 872 Db 965 CTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCCCAGC 1024 Qу 873 CTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCCCAGC 932 Db 1025 TGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATCTACC 1084 Qу 933 TGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATCTACC 992 Db 1085 TGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTACATTC 1144 Qу

Db	993	TGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTACATTC	1052
Qу	1145	AGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCATCCA	1204
Db	1053		1112
Qу	1205	CAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGACAGAG	1264
Db	1113		1172
Qу	1265	$\tt CCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCAGTGT$	1324
Db	1173		1232
Qу	1325	CTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCTCAGT	1384
Db	1233	CTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCTCAGT	1292
Qу	1385	CTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGAGCCA	1444
Db	1293		1352
Qу	1445	TCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCCCGTG	1504
Db	1353	TCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCCCGTG	1412
Qу	1505	ACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATAGCCA	1564
Db	1413	ACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATAGCCA	1472
Qу	1565	GGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGCAGCA	1624
Db	1473	GGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGCAGCA	1532
Qу	1625	GCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCTGCTC	1684
Db	1533	GCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCTGCTC	1592
Qу	1685	CCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATCCTCC	1744
Db	1593	CCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATCCTCC	1652
Qу	1745	CTACTTCCAAGAAAATAATTAAAAAAAAACTTCATTCTAAACCAAAAAAAA	
Db	1653	CTACTTCCAAGAAAATAATTAAAAAAAAACTTCATTCTAAACCAAAACAGA 1705	

# RESULT 8

US-09-717-432-1

- ; Sequence 1, Application US/09717432
- ; Patent No. 6291223
- ; GENERAL INFORMATION:
- ; APPLICANT: ZHU, YUAN
- ; APPLICANT: LI, XIAOTONG
- ; APPLICANT: CHRISTIE, GARY
- ; APPLICANT: POWELL, DAVID J.

```
TITLE OF INVENTION: Mouse Aspartic Secretase-1 (mASP1)
  FILE REFERENCE: GP-70663
  CURRENT APPLICATION NUMBER: US/09/717,432
  CURRENT FILING DATE: 2000-11-21
  PRIOR APPLICATION NUMBER: 60/166,974
  PRIOR FILING DATE: 1999-11-23
  NUMBER OF SEO ID NOS: 2
  SOFTWARE: FastSEQ for Windows Version 3.0
 SEO ID NO 1
   LENGTH: 1545
   TYPE: DNA
   ORGANISM: MUS MUSCULUS
US-09-717-432-1
                   62.9%; Score 1134.2; DB 3; Length 1545;
 Query Match
 Best Local Similarity 83.6%; Pred. No. 5.5e-260;
                       0; Mismatches 243; Indels
 Matches 1302; Conservative
                                                 12; Gaps
         1 ATGGGCGCACTGGCCCGGGCGCTGCTGCTGCTGCTGCCCAGTGGCCCAGTGGCTCCTGCGCGCC 60
Qу
                      1 ATGGGCGCGCTGCTTCGAGCACTCTTGCTCCTGGTGCTGGCGCAGTGGCTCTTGAGTGCG 60
Db
        61 GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCTCCGGGTGGCCGCGGCCACGAAC 120
Qу
          61 GTCCCGGGGCTGGCCCCGGGCCCTTCACGCTGCCCCTCCAAGTGGCCGGGGCCACGAAC 120
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Qу
                        111
       121 CACAGAGCCTCGGCTGTTCCCGGACTCGGGACCCCCGAGTTGCCCCGGGCCGATGGTCTG 180
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Qy
          11 11111 111111111 1 111
                                         181 GCCCTCGCACTGGAGCCTGTCAGGGC-----TACTGCCAACTTCTTGGCTATG 228
Db
       241 GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC 300
Qу
          229 GTGGACAACCTTCAGGGGGACTCTGGCCGCGGCTACTACCTAGAGATGCTGATCGGGACC 288
Db
       301 CCCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA 360
Qу
          289 CCTCCGCAGAAGGTACAGATTCTTGTGGACACTGGAAGCAGTAACTTCGCTGTGGCAGGT 348
Db
       361 ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC 420
Qy
           349 GCCCACACTCCTACATAGACACCTACTTTGACTCAGAGAGCTCCAGCACATACCACTCC 408
Dh
       421 AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA 480
Qy
          409 AAGGGCTTTGATGTCACTGTGAAGTACACACAGGGAAGCTGGACTGGCTTTGTTGGTGAG 468
Db
       481 GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTTCTTGTCAACATTGCCACTATT 540
Qy
          Db
       541 TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT 600
Qу
          529 TTCGAGTCTGAGAATTTCTTTTTGCCTGGTATTAAATGGAATGGAATCCTTGGACTTGCT 588
Db
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Qу	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
Db	589	TATGCTGCTTTGGCCAAGCCATCAAGCTCTCTGGAGACATTTTTTGATTCCCTGGTGGCC	648
Qу	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	649	CAAGCAAAGATTCCAGACATTTTCTCCATGCAGATGTGCGGGGCTGGATTGCCAGTAGCT	708
Qу	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Db	709	GGTTCTGGTACCAACGGAGGTAGTCTTGTCCTGGGTGGGATTGAACCAAGTTTGTATAAA	768
Qу	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Db	769	GGAGATATCTGGTATACCCCAATTAAAGAGGAATGGTACTATCAAATAGAAATCCTGAAG	828
Qу	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
Db	829	TTGGAAATTGGAGGCCAGAACCTCAACCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	888
Qу	901	ATCGTGGACAGTGCCACGCTGCTGCGCCTGCCCCAGAAGGTGTTTGATGCGGTGGTG	960
Db	889	ATTGTGGACAGTGGCACCACGCTCCTGCGCCCCAGAAGGTGTTTGATGCAGTGGTG	948
Qу	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
Db	949	GAAGCTGTGGCACGAACATCTCTGATTCCAGAGTTTTCTGATGGCTTCTGGACAGGGGCC	1008
Qу	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Db	1009	CAGCTGGCATGCTGGACAAATTCTGAAACGCCATGGGCATATTTCCCTAAGATTTCTATC	1068
Qу	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Db	1069	TACCTGAGAGATGAGAATGCCAGTCGCTCCTTCCGGATCACCATTCTCCCACAGCTCTAC	1128
Qу	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
Db	1129	ATTCAGCCCATGATGGGAGCTGGTTTCAATTATGAATGCTACCGTTTTGGTATCTCCTCT	1188
Qу	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Db	1189	TCCACAAATGCGCTGGTGATTGGTGCGACCGTGATGGAAGGCTTCTACGTGGTCTTTGAC	1248
Qу	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
Db	1249	AGAGCTCAGAGGAGGGTGGGCTTTGCAGTGAGTCCCTGTGCAGAGATTGAAGGTACCACA	1308
Qу	1321	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1380
Db	1309	GTGTCTGAAATTTCTGGGCCCTTTTCCACGGAAGACATAGCCAGCAACTGTGTTCCAGCA	1368
Qу	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440
Db	1369	CAGGCTCTGAATGAGCCCATCTTGTGGATTGTGTCCTATGCCCTGATGAGTGTGTGT	1428

.

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1441 GCCATCCTCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC 1500
QУ
           1429 GCCATTCTCCTGGTTCTGATCCTCCTGCTGCTGCTGCACTGCCGTCATGCCCCC 1488
Db
       1501 CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGA 1557
Qy
           1489 CGAGACCCTGAGGTAGTTAACGATGAGTCCTCACTAGTCAGACATCGCTGGAAATGA 1545
Db
RESULT 9
US-09-912-484-1
; Sequence 1, Application US/09912484
; Patent No. 6358725
: GENERAL INFORMATION:
  APPLICANT: Christie, Gary
  APPLICANT: Li, Xiaotong
  APPLICANT: Powell, David J.
  APPLICANT: Zhu, Yuan
  TITLE OF INVENTION: Mouse Aspartic Secretase-1 (mASP1)
  FILE REFERENCE: GP-70663-D1
  CURRENT APPLICATION NUMBER: US/09/912,484
  CURRENT FILING DATE: 2001-07-25
  PRIOR APPLICATION NUMBER: 60/166,974
  PRIOR FILING DATE: 1999-11-23
  PRIOR APPLICATION NUMBER: 09/717,432
  PRIOR FILING DATE: 2000-11-21
  NUMBER OF SEQ ID NOS: 2
  SOFTWARE: FastSEQ for Windows Version 3.0
; SEO ID NO 1
   LENGTH: 1545
   TYPE: DNA
   ORGANISM: MUS MUSCULUS
US-09-912-484-1
                     62.9%; Score 1134.2; DB 4; Length 1545;
 Query Match
 Best Local Similarity 83.6%; Pred. No. 5.5e-260;
 Matches 1302; Conservative 0; Mismatches 243; Indels
                                                               1;
                                                    12: Gaps
         1 ATGGGCGCACTGGCCGGGCGCTGCTGCTGCTGCTGGCCCAGTGGCTCCTGCGCGCC 60
Qy
           1 ATGGGCGCGCTGCTTCGAGCACTCTTGCTCCTGGTGCTGCGCGCAGTGGCTCTTGAGTGCG 60
Dh
         61 GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCCTCCGGGTGGCCGCGGCCACGAAC 120
Qy
           61 GTCCCGGGGCTGGCCCCGCGCCCTTCACGCTGCCCTCCAAGTGGCCGGGGCCACGAAC 120
Db
        121 CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGCGCCACGCCGACGCCTTG 180
Qу
                  11 1
                         1 1 11
        121 CACAGAGCCTCGGCTGTTCCCGGACTCGGGACCCCCGAGTTGCCCCGGGCCGATGGTCTG 180
Db
        181 GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCGCGGGCGCCGCCAACTTCTTGGCCATG 240
Qу
           1 1:11:11:11:11:11
        181 GCCCTCGCACTGGAGCCTGTCAGGGC-----TACTGCCAACTTCTTGGCTATG 228
Db
        241 GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC 300
Qу
           229 GTGGACAACCTTCAGGGGGACTCTGGCCGCGGCTACTACCTAGAGATGCTGATCGGGACC 288
Db
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Qy Db		CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA	
		ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	
Qy Db			
Qу	421	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	480
Db	409		468
Qу	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
Db	469	GACCTTGTCACCATCCCAAAAGGCTTCAACAGCTCTTTCTT	528
QУ	541	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	600
Db	529	TTCGAGTCTGAGAATTTCTTTTTGCCTGGTATTAAATGGAATGGAATCCTTGGACTTGCT	588
Qу	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
Db	589	TATGCTGCTTTGGCCAAGCCATCAAGCTCTCTGGAGACATTTTTTGATTCCCTGGTGGCC	648
QУ	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	649	CAAGCAAAGATTCCAGACATTTTCTCCATGCAGATGTGCGGGGCTGGATTGCCAGTAGCT	708
Qу	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Db	709	${\tt GGTTCTGGTACCAACGGAGGTAGTCTTGTCCTGGGTGGGATTGAACCAAGTTTGTATAAA}$	768
Qу	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Db	769	GGAGATATCTGGTATACCCCAATTAAAGAGGAATGGTACTATCAAATAGAAATCCTGAAG	828
QУ		TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	
Db		TTGGAAATTGGAGGCCAGAACCTCAACCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	
Qу		ATCGTGGACAGTGCCACCACGCTGCCCCCAGAAGGTGTTTGATGCGGTGGTG	
Db		ATTGTGGACAGTGGCACCACGCTCCTGCGCCCCAGAAGGTGTTTGATGCAGTGGTG	
QУ		GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	
Db		GAAGCTGTGGCACGAACATCTCTGATTCCAGAGTTTTCTGATGGCTTCTGGACAGGGGCC	
		CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	
		CAGCTGGCATGCTGGACAAATTCTGAAACGCCATGGGCATATTTCCCTAAGATTTCTATC	
		TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	
Db	1069	TACCTGAGAGATGAGAATGCCAGTCGCTCCTTCCGGATCACCATTCTCCCACAGCTCTAC	1178

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1141 ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA 1200
Qу
           1129 ATTCAGCCCATGATGGGAGCTGGTTTCAATTATGAATGCTACCGTTTTGGTATCTCCTCT 1188
Db
       1201 TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC 1260
Qγ
           1189 TCCACAAATGCGCTGGTTGATTGGTGCGACCGTGATGGAAGGCTTCTACGTGGTCTTTGAC 1248
Db
       1261 AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA 1320
Qy
           1249 AGAGCTCAGAGGAGGGTGGGCTTTGCAGTGAGTCCCTGTGCAGAGATTGAAGGTACCACA 1308
Dh
       1321 GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT 1380
Qy
           1309 GTGTCTGAAATTTCTGGGCCCTTTTCCACGGAAGACATAGCCAGCAACTGTGTTCCAGCA 1368
Db
       1381 CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA 1440
Qy
           1369 CAGGCTCTGAATGAGCCCATCTTGTGGATTGTGTCCTATGCCCTGATGAGTGTGTGGA 1428
Db
       1441 GCCATCCTCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC 1500
Qy
           1429 GCCATTCTCCTGGTTCTGATCCTCCTGCTGCTGCTGCACTGCCGTCATGCCCCC 1488
Db
       1501 CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGA 1557
Qу
           1489 CGAGACCCTGAGGTAGTTAACGATGAGTCCTCACTAGTCAGACATCGCTGGAAATGA 1545
Db
RESULT 10
US-09-280-116-32
; Sequence 32, Application US/09280116A
; Patent No. 6331427
; GENERAL INFORMATION:
  APPLICANT: Robison, Keith E.
  TITLE OF INVENTION: Nucleic Acid Molecules Encoding Human Protease Homologs
  FILE REFERENCE: 5800-24, 035800/176965
  CURRENT APPLICATION NUMBER: US/09/280,116A
  CURRENT FILING DATE: 1999-03-26
  NUMBER OF SEQ ID NOS: 268
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 32
   LENGTH: 2514
   TYPE: DNA
   ORGANISM: Homo sapiens
   FEATURE:
   OTHER INFORMATION: aspartyl proteases
US-09-280-116-32
                    61.2%; Score 1104.6; DB 4; Length 2514;
 Query Match
 Best Local Similarity 92.9%; Pred. No. 7.1e-253;
 Matches 1428; Conservative
                          0; Mismatches
                                        64;
                                           Indels
                                                   45; Gaps
                                                            24;
        305 CGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGAACCC 364
Qv
           213 CTCACCAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGG-AGGAACCC 271
Db
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QУ	365	CGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCCAAGG	424
Db	272	CGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCCAAGG	331
Qу	425	GCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAAGACC	484
Db	332	GCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAAGACC	391
Qу	485	TCGTCACCATCCCCAAAGGCTTC-AATACTTCTTTTCTTGTCAACATTGCCACTATTTTT	543
Db	392	TCGTCACCATCCCCAAAGGCTTCAAATACTTCTTTTTTTT	451
QУ	544	GAATCAGA-GAATTTCTTTTTGCCTGGGATTAAATGGAATGG	602
Db	452	GAATCAGAGGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCTTA	511
QУ	603	TGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGAC	659
Db	512	TGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGAACAC	571
QУ	660	ACAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCC-GGCTTGCCCGTTG	718
Db	572	AAGCAAAACATCCCCAAACGTTTTCTCCATGCAGATGTGTGGAGCCGGGCTTGCCCGTTG	631
QУ	719	CTGGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTT	773
Db	632	GCTGGGATTCTGGGGAACCAACGGAGGTAGTCTTGTCTT	691
QУ	774	GTATAAAGGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAAT	833
Db	692	GTATAAAGGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAAT	751
QУ	834	TCTGAAATTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTA	884
Db	752	TCTTGAAATTGGGAAATTGGGAGGCCAAAGCTTTAATTCTTGGGACTGCAGGAGGAGTAT	811
Qу	885	TAACGCAGACAAGGCCATCGTGGACAGT-GGCACCACGCTGCTGCGCCTGCCCCAG	939
Db	812	TAACGCAGACAAGGGCCATCGTTGGACAGTGGGCACCACGCTGCTGCCCCCAG	871
QУ	940	AAGGTGTTTGATGCGGTGGT-GGAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTC	998
Db	872	AAGGTGTTTGATGCGGTGGGGAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTC	931
Qу	999	TGATGGTTTCTGGACTGGGTCCCAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTC	1058
Db	932	TGATGGTTTCTGGACTGGGTCCCAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTC	991
QУ	1059	TTACTTCCCTAAAATCTCCATCTACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTAT	1118
Db	992	TTACTTCCCTAAAATCTCCATCTACCTGAGAGACGAGAACTCCAGCAGGTCATTCCGTAT	1051
Qу	1119	CACAATCCTGCCTCAGCTTTACATTCAGCCCATGATGGGGGCCGGCC	1178
Db	1052	CACAATCCTGCCTCAGCTTTACATTCAGCCCATGATGGGGGCCGGCC	1111
Ov	1179	TTACCGATTCGGCATTTCCCCATCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGA	1238

Db	1112		71
Qу	1239	GGGCTTCTACGTCATCTTCGACAGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTG 12	98
Db	1172	GGGCTTCTACGTCATCTTCGACAGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTG 12	31
Qy	1299	TGCAGAAATTGCA-GGTGCTGC-AGTGTCTGAAATTTCCGGGCCTTTCTC-AACAGAGGA 13	55
Db	1232	TGCAGAAATTGCACGGTGCTGCAAGTGTCTGAAATTTCCGGGCCTTTCTCAAACAGAGGA 12	91
Qy	1356	TGTAGCCAG-CAACTGTGTCCCCGCTC-AGTCTTTGAGCGA-GCCCATTTTGTGGATTGT 14	12
Db	1292	TGTAGCCAGCCAACTGTGTCCCCGCTCAAGTCTTTGAGCGACGCCCATTTTGTGGATTGT 13	51
Qу	1413	GTCCTATGCGCTCATGAGCGTCTGTGG-AGCCATCCTCCTTGTC-TTAATCGTCCT 14	66
Db	1352	GTCCCTATGCCGCTCAATGAAGCGTCTGTGGAAGCCATCCTCCTTGTCGTTAATTCAGTC 14	11
Qу	1467	GCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCCCGTGACCCTGAGGTCGTCAATG 15	22
Db	1412	GCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCCCGTGACCCTGAGGTCGTCAATG 14	71
Qу	1523	ATGAGTCCTCT-GGTCAGACATCGCTGGAAATGAATAGCCAGGCCTGACCTCAAGCAA 15	81
Db		ATGAGTCCTCTGGGTCAGACATCGCTGGAAATGAATAGCCAGGCCTGACCTCAAGCAA 15	
Qу	1582	CCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGCAGCAGCCGGGATCGATGGTGG 16	41
Db	1532	CCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGCAGCCGGGATCGATGGTGG 15	91
Qу		CGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCTGCTCCCAGATGCCTTCTAGAT 17	
Db		CGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCTGCTCCCAGATGCCTTCTAGAT 16	
Qу		TCACTGTCTTTTGATTCTTGATTTTCAAGC-TTTCAAATCCTCCCTACTTCCAAGAAAAA 17	
Db	1652	TCACTGTCTTTTGATTCTTGATTTTCAAGCTTTTCAAATCCTCCCTACTTCCAAGAAAAA 17	11
ДÄ	1761	TAATTAAAAAAAACTTCATTCTAAACCAAAAAAA 1797	
Db	1712	TAATTAAAAAAAACTTCATTCTAAACCAAAACAGA 1748	

# RESULT 11

US-09-280-116-85

- ; Sequence 85, Application US/09280116A
- ; Patent No. 6331427
- ; GENERAL INFORMATION:
- ; APPLICANT: Robison, Keith E.
- ; TITLE OF INVENTION: Nucleic Acid Molecules Encoding Human Protease Homologs
- ; FILE REFERENCE: 5800-24, 035800/176965
- ; CURRENT APPLICATION NUMBER: US/09/280,116A
- ; CURRENT FILING DATE: 1999-03-26
- ; NUMBER OF SEQ ID NOS: 268
- ; SOFTWARE: PatentIn Ver. 2.0
- ; SEQ ID NO 85

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LENGTH: 1021
   TYPE: DNA
   ORGANISM: Homo sapiens
   FEATURE:
   OTHER INFORMATION: aspartyl proteases
   NAME/KEY: misc feature
   LOCATION: (1)..(1021)
   OTHER INFORMATION: n = a, t, c or q
US-09-280-116-85
 Query Match
                   52.9%;
                         Score 953.6; DB 4;
                                         Length 1021;
 Best Local Similarity
                   98.8%;
                         Pred. No. 3.7e-217;
       971; Conservative
                        0; Mismatches
                                         Indels
                                                   Gaps
                                                         1;
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Qy
          38 TCCGGGTGGCCGCGCCACGAACCGCGTAGTTGCGCCCACCCCGGGACCCGGGAGCCCTG 97
Db
       158 CCGAGCGCCACGCCGACGCTTGGCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCGCGG 217
Qу
          98 CCGAGCGCCACGCCGACGCCTNGGCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGG 157
Db
       218 GCGCCGCCAACTTCTTGGCCATGGTAGACAACCTGCAGGGGGGACTCTGGCCGCGGCTACT 277
Qу
          158 GCGCCGCCAACTTCTTGGCCATGGTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACT 217
Db
       278 ACCTGGAGATGCTGATCGGGACCCCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAA 337
Qу
          218 ACCTGGAGATGCTGATCGGGACCCCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAA 277
Db
       338 GCAGTAACTTTGCCGTGGCAGGAACCCCGCACTCCTACATAGACACGTACTTTGACACAG 397
Qу
          278 GCAGTAACTTTGCCGTGGCAGGAACCCCGCACTCCTACATAGACACGTACTTTGACACAG 337
Db
       398 AGAGGTCTAGCACATACCGCTCCAAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAA 457
Qу
          338 AGAGGTCTAGCACATACCGCTCCAAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAA 397
Db
       458 GCTGGACGGCTTCGTTGGGGAAGACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTT 517
Qу
          398 GCTGGACGGCTTCGTTGGGGAAGACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTT 457
Db
       518 TTCTTGTCAACATTGCCACTATTTTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAAT 577
Qу
          458 TTCTTGTCAACATTGCCACTATTTTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAAT 517
Db
       578 GGAATGGAATACTTGGCCTAGCTTATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGA 637
Qу
          518 GGAATGGAATACTTGGCCTAGCTTATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGA 577
Db
       638 CCTTCTTCGACTCCCTGGTGACACAAGCAAACATCCCCCAACGTTTTCTCCATGCAGATGT 697
Qу
          578 CCTTCTTCGACTCCCTGGTGACACAAGCAACATCCCCCAACGTTTTCTCCATGCAGATGT 637
Db
       698 GTGGAGCCGGCTTGCCCGTTGCTGGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTG 757
Qу
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Db
        638 GTGGAGCCGGCTTGCCCGTTGCTGGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTG 697
        758 GAATTGAACCAAGTTTGTATAAAGGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGT 817
Qу
           698 GAATTGAACCAAGTTTGTATAAAGGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGT 757
Db
        818 ACTACCAGATAGAAATTCTGAAATTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCA 877
Qу
           758 ACTACCAGATAGAAATTCTGAAATTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCA 817
Db
        878 GAGAGTATAACGCAGACAAGGCCATCGTGGACAGTGGCACCACGCTGCTGCGCCTGCCCC 937
Qу
           818 GAGAGTATAACGCAGACAAGGCCATCGTGGACAGTGGCACCACGCTGCTGCCCCC 877
Db
        938 AGAAGGTGTTTGATGC--GGTGGTGGAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATT 995
Qу
           878 AGAAGGTGTTTGATGCCGGTGGTGGAAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATT 937
Db
        996 CTCTGATGGTTTCTGGACTGGGTCCCAGCTGGCGTGCTGGACGAATTCGGAAACACCTTG 1055
Qу
           938 CTCTGATGGTTTCTGGACTGGGTCCCACTTGGCGTGCTGGACGAATTCGGAAACACCTTG 997
Db
       1056 GTCTTACTTCCCTAAAATCTCCA 1078
Qу
           998 GTCTTACTTCCCTAAAATCTTCA 1020
Db
RESULT 12
US-09-724-566A-42
; Sequence 42, Application US/09724566A
; Patent No. 6627739
; GENERAL INFORMATION:
 APPLICANT: Anderson, John P.
  APPLICANT: Basi, Gurigbal
  APPLICANT: Doane, Minh Tam
  APPLICANT: Frigon, No. 6627739mand
  APPLICANT: John, Varghese
  APPLICANT: Power, Michael
  APPLICANT: Sinha, Sukanto
  APPLICANT: Tatsuno, Gwen
  APPLICANT: Tung, Jay
  APPLICANT: Wang, Shuwen
  APPLICANT: McConloque, Lisa
  TITLE OF INVENTION: Beta-Secretase Enzyme Compositions and
  TITLE OF INVENTION: Methods
  FILE REFERENCE: 228-US-NEWC2
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; PRIOR APPLICATION NUMBER: US 09/501,708
; PRIOR FILING DATE: 2000-02-10
; PRIOR APPLICATION NUMBER: 60/119,571
; PRIOR FILING DATE: 1999-02-10
; PRIOR APPLICATION NUMBER: 60/139,172
; PRIOR FILING DATE: 1999-06-15
; NUMBER OF SEQ ID NOS: 104
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CURRENT FILING DATE: 2000-11-28

CURRENT APPLICATION NUMBER: US/09/724,566A

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 42

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; LENGTH: 2348
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; TYPE: DNA ; ORGANISM: Homo sapiens

US-09-724-566A-42

Query M	atch	22.0%; Score 397.4; DB 4; Length 2348; Similarity 55.0%; Pred. No. 7.1e-85;	
Matches	86 86	Similarity 55.0%; Pred. No. 7.1e-85;  3; Conservative 0; Mismatches 676; Indels 30; Gaps	3;
Qу	2	TGGGCGCACTGGCCCGGGCGCTGCTGCTGCTCTGCTGGCCCAGTGGCTCCTGCGCGCCC	61
Db	238		297
Qу	62	CCCCGGAGCTGGCCCCCGCGCCCTTCACGCTGCCCCTCCGGGTGGCCGCGCCACGAACC	121
Db	298		357
Qу	122	GCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGCGCCACGCCGACGCTTGG	181
Db	358		417
Qу	182	CGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCGC	224
Db	418		477
Qу	225	-CAACTTCTTGGCCATGGTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGG	283
Db	478		537
Qу	284	AGATGCTGATCGGGACCCCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTA	343
Db	538	AGATGACCGTGGGCAGCCCCCGCAGACGCTCAACATCCTGGTGGATACAGGCAGCAGTA	597
Qу	344	ACTTTGCCGTGGCAGGAACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGT	403
Db	598		657
Qу	404	CTAGCACATACCGCTCCAAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGA	463
Db	658	CCAGCACATACCGGGACCTCCGGAAGGGTGTGTATGTGCCCTACACCCAGGGCAAGTGGG	717
Qy	464	CGGGCTTCGTTGGGGAAGACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTG	523
Db	718		777
Qу	524	TCAACATTGCCACTATTTTTGAATCAGAGAATTTCTTTTTTGCCTGGGATTAAATGGAATG	583
Db	778		837
Qy	584	GAATACTTGGCCTAGCTTATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCT	643
Db	838	GCATCCTGGGGCTGGCCTATGCTGAGATTGCCAGGCCTGACGACTCCCTGGAGCCTTTCT	897
Qу	644	TCGACTCCCTGGTGACACAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAG	703
Db	898		957

Qу		CCGGCTTGCCCGTTGCTGGATCTGGGACCAACGGAGGTAGTCTTGTCTT	
Db	958	$\tt CTGGCTTCCCCCTCAACCAGTCTGAAGTGCTGGCCTCTGTCGGAGGGAG$	1017
Qу	755	GTGGAATTGAACCAAGTTTGTATAAAGGAGACATCTGGTATACCCCTATTAAGGAAGAGT	814
Db	1018	GAGGTATCGACCACTCGCTGTACACAGGCAGTCTCTGGTATACACCCATCCGGCGGGAGT	1077
Qу	815	GGTACTACCAGATAGAAATTCTGAAATTGGAAATTGGAGGCCAAAGCCTTAATCTGGACT	874
Db	1078	GGTATTATGAGGTGATCATTGTGCGGGTGGAGATCAATGGACAGGATCTGAAAATGGACT	1137
QУ	875	GCAGAGAGTATAACGCAGACAAGGCCATCGTGGACAGTGGCACCACGCTGCTGCGCCTGC	934
Db	1138	GCAAGGAGTACAACTATGACAAGAGCATTGTGGACAGCGACCCAACCTTCGTTTGC	1197
QУ	935	CCCAGAAGGTGTTTGATGCGGTGGTGGAAGCTGTGGCCCGCGCATCTCTGATTCCAGAAT	994
Db	1198	CCAAGAAAGTGTTTGAAGCTGCAGTCAAATCCATCAAGGCAGCCTCCTCCACGGAGAAGT	1257
Qу	995	TCTCTGATGGTTTCTGGACTGGGTCCCAGCTGGCGTGCTGGACGAATTCGGAAACACCTT	1054
Db	1258	${\tt TCCCTGATGGTTTCTGGCTAGGAGGAGCAGCAGCAGCAGCAGCAGCAGCACCCCTT}$	1317
Qу	1055	$\tt GGTCTTACTTCCCTAAAATCTCCATCTACCTGAGAGATGAGAACTCCAGCAGGTCATTCC$	1114
Db	1318		1377
Qу	1115	GTATCACAATCCTGCCTCAGCTTTACATTCAGCCCATGATGGGGGCCGGCC	1171
Db	1378		1437
QУ	1172	ATGAATGTTACCGATTCGGCATTTCCCCATCCACAAATGCGCTGGTGATCGGTGCCACGG	1231
Db	1438	ACGACTGTTACAAGTTTGCCATCTCACAGTCATCCACGGGCACTGTTATGGGAGCTGTTA	1497
QУ	1232	TGATGGAGGGCTTCTACGTCATCTTCGACAGAGCCCAGAAGAGGGTGGGCTTCGCAGCGA	1291
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US-09-724-566A-44
; Sequence 44, Application US/09724566A
: Patent No. 6627739
; GENERAL INFORMATION:
  APPLICANT: Anderson, John P.
  APPLICANT: Basi, Guriqbal
 APPLICANT: Doane, Minh Tam
  APPLICANT: Frigon, No. 6627739mand
  APPLICANT: John, Varghese
  APPLICANT: Power, Michael
  APPLICANT: Sinha, Sukanto
  APPLICANT:
            Tatsuno, Gwen
            Tung, Jay
  APPLICANT:
  APPLICANT: Wang, Shuwen
  APPLICANT: McConlogue, Lisa
  TITLE OF INVENTION: Beta-Secretase Enzyme Compositions and
  TITLE OF INVENTION: Methods
  FILE REFERENCE: 228-US-NEWC2
  CURRENT APPLICATION NUMBER: US/09/724,566A
  CURRENT FILING DATE: 2000-11-28
  PRIOR APPLICATION NUMBER: US 09/501,708
  PRIOR FILING DATE: 2000-02-10
  PRIOR APPLICATION NUMBER: 60/119,571
; PRIOR FILING DATE: 1999-02-10
  PRIOR APPLICATION NUMBER: 60/139,172
  PRIOR FILING DATE: 1999-06-15
  NUMBER OF SEQ ID NOS: 104
 SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 44
   LENGTH: 2348
   TYPE: DNA
   ORGANISM: Homo sapiens
US-09-724-566A-44
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 Query Match
 Best Local Similarity 55.0%; Pred. No. 7.1e-85;
 Matches 863; Conservative 0; Mismatches 676; Indels
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US-09-724-566A-48

- ; Sequence 48, Application US/09724566A
- ; Patent No. 6627739
- ; GENERAL INFORMATION:
- ; APPLICANT: Anderson, John P.
- ; APPLICANT: Basi, Guriqbal
- ; APPLICANT: Doane, Minh Tam
- ; APPLICANT: Frigon, No. 6627739mand
- ; APPLICANT: John, Varghese
- ; APPLICANT: Power, Michael
- ; APPLICANT: Sinha, Sukanto
- ; APPLICANT: Tatsuno, Gwen
- ; APPLICANT: Tung, Jay
- ; APPLICANT: Wang, Shuwen
- ; APPLICANT: McConlogue, Lisa
- ; TITLE OF INVENTION: Beta-Secretase Enzyme Compositions and
- ; TITLE OF INVENTION: Methods
- ; FILE REFERENCE: 228-US-NEWC2

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CURRENT APPLICATION NUMBER: US/09/724,566A
  CURRENT FILING DATE: 2000-11-28
  PRIOR APPLICATION NUMBER: US 09/501,708
  PRIOR FILING DATE: 2000-02-10
  PRIOR APPLICATION NUMBER: 60/119,571
  PRIOR FILING DATE: 1999-02-10
  PRIOR APPLICATION NUMBER: 60/139,172
  PRIOR FILING DATE: 1999-06-15
  NUMBER OF SEQ ID NOS: 104
  SOFTWARE: FastSEQ for Windows Version 4.0
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   OTHER INFORMATION: Expression Vector pCEK
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   NAME/KEY: misc feature
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US-09-724-566A-48
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; Patent No. 6627739
; GENERAL INFORMATION:
  APPLICANT: Anderson, John P.
  APPLICANT: Basi, Guriqbal
  APPLICANT: Doane, Minh Tam
  APPLICANT: Frigon, No. 6627739mand
  APPLICANT: John, Varghese
  APPLICANT: Power, Michael
 APPLICANT: Sinha, Sukanto
  APPLICANT: Tatsuno, Gwen
  APPLICANT: Tung, Jay
  APPLICANT: Wang, Shuwen
  APPLICANT: McConlogue, Lisa
  TITLE OF INVENTION: Beta-Secretase Enzyme Compositions and
  TITLE OF INVENTION: Methods
  FILE REFERENCE: 228-US-NEWC2
  CURRENT APPLICATION NUMBER: US/09/724,566A
  CURRENT FILING DATE: 2000-11-28
  PRIOR APPLICATION NUMBER: US 09/501,708
  PRIOR FILING DATE: 2000-02-10
  PRIOR APPLICATION NUMBER: 60/119,571
  PRIOR FILING DATE: 1999-02-10
  PRIOR APPLICATION NUMBER: 60/139,172
  PRIOR FILING DATE: 1999-06-15
  NUMBER OF SEQ ID NOS: 104
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; SEQ ID NO 1
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   ORGANISM: Homo sapiens
US-09-724-566A-1
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21.9%; Score 395; DB 4; Length 1503;

Query Match

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## GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

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February 28, 2004, 05:52:24; Search time 637 Seconds Run on:

(without alignments)

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US-09-668-314C-1 Title:

Perfect score: 1804

Sequence: 

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

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39	1784.4	98.9	1879	12	US-10-164-749A-195	Sequence 195, App
40	1784.4	98.9	1879	12	US-10-206-915-71	Sequence 71, Appl
41	1784.4	98.9	1879	12	US-10-199-670-71	Sequence 71, Appl
42	1784.4	98.9	1879	13	US-10-052-586-71	Sequence 71, Appl
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44	1784.4	98.9	1879	14		Sequence 71, Appl
45	1784.4	98.9	1879	14	US-10-175-737-71	Sequence 71, Appl

## ALIGNMENTS

# RESULT 1 US-09-794-927-1

- ; Sequence 1, Application US/09794927
- ; Patent No. US20010016324A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Gurney, Mark E.

```
Bienkowski, Michael J.
  APPLICANT:
            Heinrikson, Robert L.
  APPLICANT:
  APPLICANT:
            Parodi, Luis A.
  APPLICANT:
            Yan, Rigiang
  TITLE OF INVENTION: ALZHEIMER'S DISEASE SECRETASE, APP SUBSTRATES THEREFOR,
AND
  TITLE OF INVENTION: USES
  TITLE OF INVENTION: THEREFOR
  FILE REFERENCE: 28341/6280FG
  CURRENT APPLICATION NUMBER: US/09/794,927
  CURRENT FILING DATE: 2001-02-27
  PRIOR APPLICATION NUMBER: 09/416,901
  PRIOR FILING DATE: 1999-10-13
  PRIOR APPLICATION NUMBER: 60/155,493
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 09/404,133
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: PCT/US99/20881
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 60/101,594
  PRIOR FILING DATE: 1998-09-24
  NUMBER OF SEQ ID NOS: 73
  SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 1
   LENGTH: 1804
   TYPE: DNA
   ORGANISM: Homo sapiens
US-09-794-927-1
                     100.0%; Score 1804;
                                        DB 9;
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                     100.0%; Pred. No. 0;
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Qy	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Db	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
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US-09-795-847-1

- ; Sequence 1, Application US/09795847
- ; Patent No. US20010018208A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Gurney, Mark E.
- ; APPLICANT: Bienkowski, Michael J.
- ; APPLICANT: Heinrikson, Robert L.
- ; APPLICANT: Parodi, Luis A.
- ; APPLICANT: Yan, Riqiang
- ; TITLE OF INVENTION: ALZHEIMER'S DISEASE SECRETASE, APP SUBSTRATES THEREFOR,
- ; TITLE OF INVENTION: USES

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TITLE OF INVENTION: THEREFOR
  FILE REFERENCE: 28341/6280DE
  CURRENT APPLICATION NUMBER: US/09/795,847
  CURRENT FILING DATE: 2001-02-28
  PRIOR APPLICATION NUMBER: 09/416,901
  PRIOR FILING DATE: 1999-10-13
  PRIOR APPLICATION NUMBER: 60/155,493
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 09/404,133
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: PCT/US99/20881
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 60/101,594
  PRIOR FILING DATE: 1998-09-24
  NUMBER OF SEQ ID NOS: 73
  SOFTWARE: PatentIn Ver. 2.0
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   LENGTH: 1804
   TYPE: DNA
   ORGANISM: Homo sapiens
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; Sequence 1, Application US/09794743
; Patent No. US20010021391A1
; GENERAL INFORMATION:
  APPLICANT: Gurney, Mark E.
          Bienkowski, Michael J.
  APPLICANT:
  APPLICANT:
          Heinrikson, Robert L.
  APPLICANT:
          Parodi, Luis A.
  APPLICANT:
          Yan, Rigiang
  TITLE OF INVENTION: ALZHEIMER'S DISEASE SECRETASE, APP SUBSTRATES THEREFOR,
AND
  TITLE OF INVENTION:
                 USES
  TITLE OF INVENTION:
                 THEREFOR
  FILE REFERENCE: 28341/6280BC
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CURRENT APPLICATION NUMBER: US/09/794,743

PRIOR APPLICATION NUMBER: 09/416,901

PRIOR APPLICATION NUMBER: 60/155,493

PRIOR FILING DATE: 1999-10-13

2001-02-27

CURRENT FILING DATE:

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  PRIOR APPLICATION NUMBER: 09/404,133
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: PCT/US99/20881
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 60/101,594
                1998-09-24
  PRIOR FILING DATE:
  NUMBER OF SEQ ID NOS: 73
  SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 1
   LENGTH: 1804
   TYPE: DNA
   ORGANISM: Homo sapiens
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 Query Match
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QУ	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
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QУ	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Db	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
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Db	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Qу	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
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Qу	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Db	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
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Db	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
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Qу	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440
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          1621 AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT 1680
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; Sequence 1, Application US/09794748
; Patent No. US20020037315A1
 GENERAL INFORMATION:
           Gurney, Mark E.
  APPLICANT:
           Bienkowski, Michael J.
  APPLICANT:
          Heinrikson, Robert L.
  APPLICANT:
           Parodi, Luis A.
  APPLICANT:
           Yan, Rigiang
  APPLICANT:
  TITLE OF INVENTION: ALZHEIMER'S DISEASE SECRETASE, APP SUBSTRATES THEREFOR,
AND
  TITLE OF INVENTION:
                  USES
  TITLE OF INVENTION:
                  THEREFOR
  FILE REFERENCE: 28341/6280JL
  CURRENT APPLICATION NUMBER: US/09/794,748
  CURRENT FILING DATE: 2001-02-27
  PRIOR APPLICATION NUMBER: 09/416,901
  PRIOR FILING DATE: 1999-10-13
  PRIOR APPLICATION NUMBER: 60/155,493
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 09/404,133
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: PCT/US99/20881
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 60/101,594
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PRIOR FILING DATE: 1998-09-24

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NUMBER OF SEQ ID NOS: 73
  SOFTWARE: PatentIn Ver. 2.0
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  TYPE: DNA
  ORGANISM: Homo sapiens
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                          Pred. No. 0;
 Best Local Similarity
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Db	901	ATCGTGGACAGTGCCACCACGCTGCCCCCAGAAGGTGTTTGATGCGGTGGTG	960
Qу	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
Db	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
QУ	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Db	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
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Qу		ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	
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Qу		TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	
Db		TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	
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QУ		GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	
Db		GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	
Qу		CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	
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Qу		GCCATCCTCGTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	
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RESULT 5
US-09-794-925-1
; Sequence 1, Application US/09794925
; Patent No. US20020064819A1
; GENERAL INFORMATION:
; APPLICANT: Gurney, Mark E.
 APPLICANT: Bienkowski, Michael J.
  APPLICANT: Heinrikson, Robert L.
  APPLICANT: Parodi, Luis A.
  APPLICANT: Yan, Rigiang
  TITLE OF INVENTION: ALZHEIMER'S DISEASE SECRETASE, APP SUBSTRATES THEREFOR,
AND USES
  TITLE OF INVENTION: THEREFOR
  FILE REFERENCE: 28341/6280HI
  CURRENT APPLICATION NUMBER: US/09/794,925
  CURRENT FILING DATE: 2001-02-27
  PRIOR APPLICATION NUMBER: 09/416,901
  PRIOR FILING DATE: 1999-10-13
  PRIOR APPLICATION NUMBER: 60/155,493
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 09/404,133
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: PCT/US99/20881
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 60/101,594
  PRIOR FILING DATE: 1998-09-24
  NUMBER OF SEQ ID NOS: 73
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
   LENGTH: 1804
   TYPE: DNA
   ORGANISM: Homo sapiens
US-09-794-925-1
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100.0%; Score 1804; DB 9; Length 1804; Query Match 100.0%; Pred. No. 0; Best Local Similarity 0; 0; Mismatches Indels Gaps Matches 1804; Conservative 0: 1 ATGGGCGCACTGGCCGGGCGCTGCTGCTGCTGCTGCCCAGTGGCTCCTGCGCGCC 60 Qy 1 ATGGGCGCACTGGCCCGGGCGCTGCTGCTGCCTCTGCTGGCCCAGTGGCTCCTGCGCGCC 60 Db 61 GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCCTCCGGGTGGCCGCGGCCACGAAC 120 Qу GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCCTCCGGGTGGCCGCGGCCACGAAC 120 Db 121 CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGGGCCACGCCGACGGCTTG 180 Qу 121 CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGCGCCACGCCGACGGCTTG 180 Db 181 GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCAACTTCTTGGCCATG 240 Qу 181 GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCAACTTCTTGGCCATG 240 Db 241 GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC 300 Qy 241 GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC 300 Db 301 CCCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA 360 Qу 301 CCCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA 360 Db 361 ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC 420 Qу 361 ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC 420 Db 421 AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA 480 Qу 421 AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA 480 Db 481 GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT 540 Qу 481 GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT 540 Db 541 TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT 600 Qy 541 TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT 600 Db 601 TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA 660 Qу 601 TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA 660 Db 661 CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT 720 Qу 661 CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT 720 Db 721 GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA 780 Qу 721 GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA 780 Db 781 GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA 840 Qу

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RESULT 6
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; Sequence 1, Application US/09681442
; Patent No. US20020081634A1
; GENERAL INFORMATION:
  APPLICANT: Gurney, Mark E.
  APPLICANT: Bienkowski, Michael J.
  APPLICANT: Heinrikson, Robert L.
  APPLICANT: Parodi, Luis A.
  APPLICANT: Yan, Rigiang
  TITLE OF INVENTION: ALZHEIMER'S DISEASE SECRETASE, APP SUBSTRATES THEREFOR,
AND USES
  TITLE OF INVENTION: THEREFOR
  FILE REFERENCE: 28341/6280FG
  CURRENT APPLICATION NUMBER: US/09/681,442
  CURRENT FILING DATE: 2001-04-05
  PRIOR APPLICATION NUMBER: 09/416,901
  PRIOR FILING DATE: 1999-10-13
  PRIOR APPLICATION NUMBER: 60/155,493
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 09/404,133
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: PCT/US99/20881
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 60/101,594
  PRIOR FILING DATE: 1998-09-24
  NUMBER OF SEQ ID NOS: 73
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
   LENGTH: 1804
   TYPE: DNA
   ORGANISM: Homo sapiens
US-09-681-442-1
  Query Match
                     100.0%; Score 1804; DB 9; Length 1804;
  Best Local Similarity 100.0%; Pred. No. 0;
                          0; Mismatches
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 Matches 1804; Conservative
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           1 ATGGGCGCACTGGCCGGGCGCTGCTGCTGCTCTGCTGGCCCAGTGGCTCCTGCGCGCC 60
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Db	901	ATCGTGGACAGTGGCACCACGCTGCCCCTGCCCCAGAAGGTGTTTGATGCGGTGGTG	960
Qу	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
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Db		GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	
Qу		CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	
Db		CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	
Qу		GCCATCCTCGTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	
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Qу		GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	
Db		GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	
ДУ		AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	
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Qу
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; Sequence 1, Application US/09869414
; Publication No. US20030077226A1
; GENERAL INFORMATION:
  APPLICANT: Beinkowski et al.
; TITLE OF INVENTION: ALZHEIMER'S DISEASE SECRETASE, APP SUBSTRATES THEREFOR,
AND USES
  TITLE OF INVENTION: THEREFOR
  FILE REFERENCE: 28341/6280M
  CURRENT APPLICATION NUMBER: US/09/869,414
  CURRENT FILING DATE: 2001-06-27
  PRIOR APPLICATION NUMBER: 09/416,901
  PRIOR FILING DATE: 1999-10-13
  PRIOR APPLICATION NUMBER: 60/155,493
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 09/404,133
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: PCT/US99/20881
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 60/101,594
  PRIOR FILING DATE: 1998-09-24
  NUMBER OF SEQ ID NOS: 73
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 Best Local Similarity
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Qу	361	ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	420
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Qу	421	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	480
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Qу	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
Db	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
Qу	541	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	600
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QУ	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
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Qу	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
QУ	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Db	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
QУ	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Db	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
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QУ	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Db	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
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Db	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
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Db	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTCCCCA	1200
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US-09-548-366-1

<sup>;</sup> Sequence 1, Application US/09548366 ; Publication No. US20030104365A1

<sup>;</sup> GENERAL INFORMATION:

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APPLICANT:
            Gurney, Mark E.
            Bienkowski, Michael J.
  APPLICANT:
            Heinrikson, Robert L.
  APPLICANT:
            Parodi, Luis A.
  APPLICANT:
  APPLICANT:
            Yan, Rigiang
  TITLE OF INVENTION: ALZHEIMER'S DISEASE SECRETASE, APP SUBSTRATES THEREFOR,
AND
  TITLE OF INVENTION: USES THEREFOR
  FILE REFERENCE: 28341/6280A
  CURRENT APPLICATION NUMBER: US/09/548,366
  CURRENT FILING DATE: 2000-04-12
  PRIOR APPLICATION NUMBER: 60/155,493
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 09/404,133
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: PCT/US99/20881
  PRIOR FILING DATE: 1999-09-23
  PRIOR APPLICATION NUMBER: 60/101,594
  PRIOR FILING DATE: 1998-09-24
  NUMBER OF SEQ ID NOS: 65
  SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 1
   LENGTH: 1804
   TYPE: DNA
   ORGANISM: Homo sapiens
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 Query Match
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Qу	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
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US-09-978-295A-195

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- ; Patent No. US20020156006A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Ashkenazi, Avi
- ; APPLICANT: Baker Kevin P.
- ; APPLICANT: Botstein, David
- ; APPLICANT: Desnoyers, Luc
- ; APPLICANT: Eaton, Dan
- ; APPLICANT: Ferrara, Napoleon
- ; APPLICANT: Filvaroff, Ellen
- ; APPLICANT: Fong, Sherman
- ; APPLICANT: Gao, Wei-Qiang
- ; APPLICANT: Gerber, Hanspeter

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Gerritsen, Mary E.
APPLICANT:
 APPLICANT: Goddard, Audrey
 APPLICANT: Godowski, Paul J.
 APPLICANT: Grimaldi, J. Christopher
APPLICANT: Gurney, Austin L.
 APPLICANT: Hillan, Kenneth J
 APPLICANT: Kljavin, Ivar J.
 APPLICANT: Kuo, Sophia S.
 APPLICANT: Napier, Mary A.
 APPLICANT: Pan, James;
 APPLICANT: Paoni, Nicholas F. APPLICANT: Roy, Margaret Ann
 APPLICANT: Shelton, David L.
 APPLICANT: Stewart, Timothy A.
 APPLICANT: Tumas, Daniel
 APPLICANT: Williams, P. Mickey
 APPLICANT: Wood, William I.
 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 TITLE OF INVENTION: Acids Encoding the Same
 FILE REFERENCE: P2630P1C11
 CURRENT APPLICATION NUMBER: US/09/978,295A
 CURRENT FILING DATE: 2001-10-15
 PRIOR APPLICATION NUMBER: 09/918585
 PRIOR FILING DATE: 2001-07-30
 PRIOR APPLICATION NUMBER: 60/062250
 PRIOR FILING DATE: 1997-10-17
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- ; PRIOR APPLICATION NUMBER: 60/082704
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- PRIOR FILING DATE: 1998-04-22
- PRIOR APPLICATION NUMBER: 60/082700
- ; PRIOR FILING DATE: 1998-04-22
- ; PRIOR APPLICATION NUMBER: 60/082797
- ; PRIOR FILING DATE: 1998-04-22
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- ; PRIOR APPLICATION NUMBER: 60/083336
- ; PRIOR FILING DATE: 1998-04-27
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US-09-978-697-195

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- ; GENERAL INFORMATION:
- ; APPLICANT: Ashkenazi, Avi
- ; APPLICANT: Baker Kevin P.
- : APPLICANT: Botstein, David
- ; APPLICANT: Desnoyers, Luc
- ; APPLICANT: Eaton, Dan
- ; APPLICANT: Ferrara, Napoleon
- ; APPLICANT: Filvaroff, Ellen
- APPLICANT: Fong, Sherman
- ; APPLICANT: Gao, Wei-Qiang
- ; APPLICANT: Gerber, Hanspeter
- ; APPLICANT: Gerritsen, Mary E.
- ; APPLICANT: Goddard, Audrey
- ; APPLICANT: Godowski, Paul J.
- : APPLICANT: Grimaldi, J. Christopher
- ; APPLICANT: Gurney, Austin L.
- ; APPLICANT: Hillan, Kenneth J
- APPLICANT: Kljavin, Ivar J.
- ; APPLICANT: Kuo, Sophia S.
- ; APPLICANT: Napier, Mary A.
- ; APPLICANT: Pan, James;
- ; APPLICANT: Paoni, Nicholas F.
- ; APPLICANT: Roy, Margaret Ann
- ; APPLICANT: Shelton, David L.
- ; APPLICANT: Stewart, Timothy A.

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APPLICANT:
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; GENERAL INFORMATION:
  APPLICANT: Ashkenazi, Avi
  APPLICANT: Baker Kevin P.
 APPLICANT: Botstein, David
 APPLICANT: Desnoyers, Luc
  APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
  APPLICANT: Grimaldi, J. Christopher
  APPLICANT: Gurney, Austin L. APPLICANT: Hillan, Kenneth J
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James;
  APPLICANT: Paoni, Nicholas F.
  APPLICANT: Roy, Margaret Ann
  APPLICANT: Shelton, David L. APPLICANT: Stewart, Timothy A.
  APPLICANT: Tumas, Daniel
   APPLICANT: Williams, P. Mickey
   APPLICANT: Wood, William I.
   TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
   TITLE OF INVENTION: Acids Encoding the Same
   FILE REFERENCE: P2630P1C9
   CURRENT APPLICATION NUMBER: US/09/978,192A
   CURRENT FILING DATE: 2001-10-15
   PRIOR APPLICATION NUMBER: 09/918585
  PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
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Db	214	CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGCGCCACGCCGACGCCTTG	273
Qу	181	GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCCAACTTCTTGGCCATG	240
Db	274	GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCAACTTCTTGGCCATG	333
Qу	241	GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC	300
Db	334	GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC	393
Qу	301	CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA	360
Db	394	CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA	453
QУ	361	ACCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	420
Db	454	ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC	513
Qу	421	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	480
Db	514	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	573
Qу	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
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QУ	541	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	600
Db	634	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	693
Qу	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
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QУ	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
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Qу	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
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QУ	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
Db	934	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	993
Qу	901	ATCGTGGACAGTGGCACCACGCTGCTGCGCCCAGAAGGTGTTTGATGCGGTGGTG	960
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Qу	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
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Qу	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
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Qу	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
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; GENERAL INFORMATION:
  APPLICANT: Ashkenazi, Avi
 APPLICANT: Baker Kevin P.
  APPLICANT: Botstein, David
  APPLICANT: Desnoyers, Luc
  APPLICANT: Eaton, Dan
 APPLICANT: Ferrara, Napoleon
  APPLICANT: Filvaroff, Ellen
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; APPLICANT: Shelton, David L.
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  APPLICANT: Wood, William I.
   TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
   TITLE OF INVENTION: Acids Encoding the Same
   FILE REFERENCE: P2630P1C63
   CURRENT APPLICATION NUMBER: US/09/999,832A
   CURRENT FILING DATE: 2001-10-24
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            274 GCGCTCGCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCCAACTTCTTGGCCATG 333
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        241 GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC 300
Qу
            334 GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC 393
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        301 CCCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA 360
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Qу	421	AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA	480
Db	514		573
Qу	481	GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT	540
Db	574		633
Qу	541	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	600
Db	634		693
Qу	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
Db	694	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	753
Qу	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	754	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	813
Qу	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Db	814	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	873
Qу	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Db	874	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	933
QУ	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
Db	934	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	993
Qу		ATCGTGGACAGTGGCACCACGCTGCTGCGCCCCAGAAGGTGTTTGATGCGGTGGTG	
Db		ATCGTGGACAGTGGCACCACGCTGCTGCCCCCAGAAGGTGTTTGATGCGGTGGTG	
Qу		GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	
Db		GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	
QУ		CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	
Db		CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	
Qу		TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	
Db		TACCTGAGAGACGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	
Qу	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200

Db	1234	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1293
QУ	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Db	1294	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1353
Qу	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
Db	1354		1413
Qу	1321	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1380
Db	1414		1473
Qу	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440
Db	1474		1533
Qу	1441	GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	1500
Db	1534	GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC	1593
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Db	1594	CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA	1653
Qу	1561	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	1620
Db	1654	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC	1713
Qу	1621	AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	1680
Db	1714	AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT	1773
Qу	1681	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC	1740
Db	1774	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC	1833
Qу	1741	CTCCCTACTTCCAAGAAAAATAATTAAAAAAAAAAACTTCATTCTAA 1786	
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US-09-978-189-195

- ; Sequence 195, Application US/09978189
- ; Publication No. US20030004102A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Ashkenazi, Avi
- ; APPLICANT: Baker Kevin P.
- ; APPLICANT: Botstein, David
- ; APPLICANT: Desnoyers, Luc
- ; APPLICANT: Eaton, Dan
- ; APPLICANT: Ferrara, Napoleon
- ; APPLICANT: Filvaroff, Ellen
- ; APPLICANT: Fong, Sherman
- ; APPLICANT: Gao, Wei-Qiang

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APPLICANT: Gerber, Hanspeter
  APPLICANT: Gerritsen, Mary E.
  APPLICANT: Goddard, Audrey
  APPLICANT: Godowski, Paul J.
  APPLICANT: Grimaldi, J. Christopher
  APPLICANT: Gurney, Austin L.
  APPLICANT: Hillan, Kenneth J
  APPLICANT: Kljavin, Ivar J.
 APPLICANT: Kuo, Sophia S.
  APPLICANT: Napier, Mary A.
  APPLICANT: Pan, James;
APPLICANT: Paoni, Nicholas F.
;
  APPLICANT: Roy, Margaret Ann
  APPLICANT: Shelton, David L.
  APPLICANT: Stewart, Timothy A.
  APPLICANT: Tumas, Daniel
  APPLICANT: Williams, P. Mickey
  APPLICANT: Wood, William I.
  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
  TITLE OF INVENTION: Acids Encoding the Same
  FILE REFERENCE: P2630P1C7
  CURRENT APPLICATION NUMBER: US/09/978,189
  CURRENT FILING DATE: 2001-10-15
  PRIOR APPLICATION NUMBER: 09/918585
  PRIOR FILING DATE: 2001-07-30
  PRIOR APPLICATION NUMBER: 60/062250
  PRIOR FILING DATE: 1997-10-17
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  PRIOR FILING DATE: 1997-11-13
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; PRIOR APPLICATION NUMBER: 60/079664
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  PRIOR FILING DATE: 1998-05-15
  PRIOR APPLICATION NUMBER: 60/085697
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Db
        61 GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCCTCCGGGTGGCCGCGGCCACGAAC 120
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           154 GCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCTCCGGGTGGCCGCGGCCACGAAC 213
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QУ
           214 CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGGCCCACGCCGACGGCTTG 273
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           274 GCGCTCGCCTGGAGCCTGCCCTGGCGTCCCCCGCGGGCGCCCAACTTCTTGGCCATG 333
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           334 GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC 393
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        481 GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT 540
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	Qу	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
	Db	694	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	753
	QУ	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
	Db	754	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	813
	QУ	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
	Db	814	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	873
	QУ	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
	Db	874	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	933
	QУ	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
	Db	934	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	993
	QУ	901	ATCGTGGACAGTGGCACCACGCTGCTGCCCCAGAAGGTGTTTGATGCGGTGGTG	960
	Db	994	ATCGTGGACAGTGGCACCACGCTGCTGCGCCCCAGAAGGTGTTTGATGCGGTGGTG	1053
	QУ	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
	Db	1054	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1113
	QУ	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
	Db	1114	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1173
	Qу	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
	Db	1174	TACCTGAGAGACGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1233
,	Qу	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
	Db	1234	ATTCAGCCCATGATGGGGGCCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1293
	QУ	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
	Db	1294	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1353
	QУ	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
	Db	1354	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1413
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QУ	1681	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC 17	140
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US-09-978-608A-195

- ; Sequence 195, Application US/09978608A
- ; Publication No. US20030045462A1
- ; GENERAL INFORMATION:
- APPLICANT: Ashkenazi, Avi
- APPLICANT: Baker Kevin P.
- APPLICANT: Botstein, David
- APPLICANT: Desnoyers, Luc
- APPLICANT: Eaton, Dan
- APPLICANT: Ferrara, Napoleon
- APPLICANT: Filvaroff, Ellen
- APPLICANT: Fong, Sherman
- APPLICANT: Gao, Wei-Qiang
- Gerber, Hanspeter APPLICANT:
- APPLICANT: Gerritsen, Mary E.
- APPLICANT: Goddard, Audrey
- APPLICANT: Godowski, Paul J.
- APPLICANT: Grimaldi, J. Christopher
- APPLICANT: Gurney, Austin L.
- APPLICANT: Hillan, Kenneth J
- Kljavin, Ivar J. APPLICANT:
- APPLICANT: Kuo, Sophia S.
- APPLICANT: Napier, Mary A.
- APPLICANT: Pan, James;
- Paoni, Nicholas F. APPLICANT:
- APPLICANT: Roy, Margaret Ann
- ; APPLICANT: Shelton, David L.

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Stewart, Timothy A.
  APPLICANT:
           Tumas, Daniel
  APPLICANT:
           Williams, P. Mickey
  APPLICANT:
           Wood, William I.
  APPLICANT:
  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
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  CURRENT APPLICATION NUMBER: US/09/978,608A
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           514 AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA 573
Db
        481 GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTAÍT 540
Qу
           574 GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT 633
Db
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QУ	541	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	600
Db	634	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	693 .
Qу	601	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	660
Db	694	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	753
Qу	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	754	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	813
Qy	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Db	814	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	873
Qу	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Db	874	GGAGACATCTGGTATACCCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	933
QУ	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
Db	934	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	993
QУ	901	ATCGTGGACAGTGGCACCACGCTGCTGCGCCCAGAAGGTGTTTGATGCGGTGGTG	960
Db	994	ATCGTGGACAGTGGCACCACGCTGCTGCGCCCAGAAGGTGTTTGATGCGGTGGTG	1053
Qy	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
Db	1054	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1113
Qy	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Db	1114	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1173
Qу	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Db	1174	TACCTGAGAGACGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1233
QУ	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
Db	1234	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1293
Qy	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Db	1294	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1353
Qу	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
Db		AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	
QУ		GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	
Db	1414	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1473
017	1201	CACTCTTTCACCCACCCCATTTTCTGCATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440

Db	1474	
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Db	1534	GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC 1593
Qy	1501	CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA 1560
Db	1594	CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA 1653
Qy	1561	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC 1620
Db	1654	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC 1713
Qу	1621	AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT 1680
Db	1714	AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT 1773
Qy	1681	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC 1740
Db	1774	GCTCCCAGATGCCTTCTAGATTCACTGTCTTTTGATTCTTGATTTTCAAGCTTTCAAATC 1833
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- ; Sequence 195, Application US/09978585A
- ; Publication No. US20030049633A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Ashkenazi, Avi
- ; APPLICANT: Baker Kevin P.
- ; APPLICANT: Botstein, David
- ; APPLICANT: Desnoyers, Luc
- ; APPLICANT: Eaton, Dan
- ; APPLICANT: Ferrara, Napoleon
- ; APPLICANT: Filvaroff, Ellen
- ; APPLICANT: Fong, Sherman
- ; APPLICANT: Gao, Wei-Qiang
- ; APPLICANT: Gerber, Hanspeter
- ; APPLICANT: Gerritsen, Mary E.
- APPLICANT: Goddard, Audrey
- ; APPLICANT: Godowski, Paul J.
- ; APPLICANT: Grimaldi, J. Christopher
- ; APPLICANT: Gurney, Austin L.
- ; APPLICANT: Hillan, Kenneth J
- ; APPLICANT: Kljavin, Ivar J.
- ; APPLICANT: Kuo, Sophia S.
- ; APPLICANT: Napier, Mary A.
- ; APPLICANT: Pan, James;
- ; APPLICANT: Paoni, Nicholas F.
- ; APPLICANT: Roy, Margaret Ann
- ; APPLICANT: Shelton, David L.
- ; APPLICANT: Stewart, Timothy A.

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Tumas, Daniel
  APPLICANT:
           Williams, P. Mickey
  APPLICANT:
           Wood, William I.
  APPLICANT:
  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
  TITLE OF INVENTION: Acids Encoding the Same
  FILE REFERENCE: P2630P1C15
  CURRENT APPLICATION NUMBER: US/09/978,585A
  CURRENT FILING DATE: 2001-10-16
  NUMBER OF SEO ID NOS: 624
 Prior Application removed - See File Wrapper or Palm
 SEO ID NO 195
   LENGTH: 1879
   TYPE: DNA
   ORGANISM: Homo sapien
US-09-978-585A-195
                          Score 1784.4; DB 10; Length 1879;
 Query Match
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                    99.9%;
                          Pred. No. 0;
 Best Local Similarity
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 Matches 1785; Conservative
                                        1;
                                           Indels
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        481 GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT 540
Qу
           574 GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT 633
Db
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Qу
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Db	634	TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT	693
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Db	694	TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA	753
Qу	661	CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT	720
Db	754		813
Qу	721	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	780
Db	814	GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA	873
QУ	781	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	840
Db	874	GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA	933
Qу	841	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	900
Db	934	TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC	993
QУ	901	ATCGTGGACAGTGGCACCACGCTGCTGCGCCCAGAAGGTGTTTGATGCGGTGGTG	960
Db	994		1053
Qу	961	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1020
Db	1054	GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC	1113
QУ	1021	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1080
Db	1114	CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC	1173
Qу	1081	TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1140
Db	1174	TACCTGAGAGACGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC	1233
Qу	1141	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1200
Db	1234	ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA	1293
Qу	1201	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1260
Db	1294	TCCACAAATGCGCTGGTGATCGGTGCCACGGTGATGGAGGGCTTCTACGTCATCTTCGAC	1353
QУ	1261	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1320
Db	1354	AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA	1413
Qу	1321	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1380
Db	1414	GTGTCTGAAATTTCCGGGCCTTTCTCAACAGAGGATGTAGCCAGCAACTGTGTCCCCGCT	1473
QУ	1381	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA	1440

Db	1474	CAGTCTTTGAGCGAGCCCATTTTGTGGATTGTGTCCTATGCGCTCATGAGCGTCTGTGGA 1533
Qy	1441	GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC 1500
Db	1534	GCCATCCTCCTTGTCTTAATCGTCCTGCTGCTGCTGCCGTTCCGGTGTCAGCGTCGCCCC 1593
QУ	1501	CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA 1560
Db	1594	CGTGACCCTGAGGTCGTCAATGATGAGTCCTCTCTGGTCAGACATCGCTGGAAATGAATA 1653
Qy	1561	GCCAGGCCTGACCTCAAGCAACCATGAACTCAGCTATTAAGAAAATCACATTTCCAGGGC 1620
Db	1654	
Qy	1621	AGCAGCCGGGATCGATGGTGGCGCTTTCTCCTGTGCCCACCCGTCTTCAATCTCTGTTCT 1680
Db	1714	
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Db	1834	

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